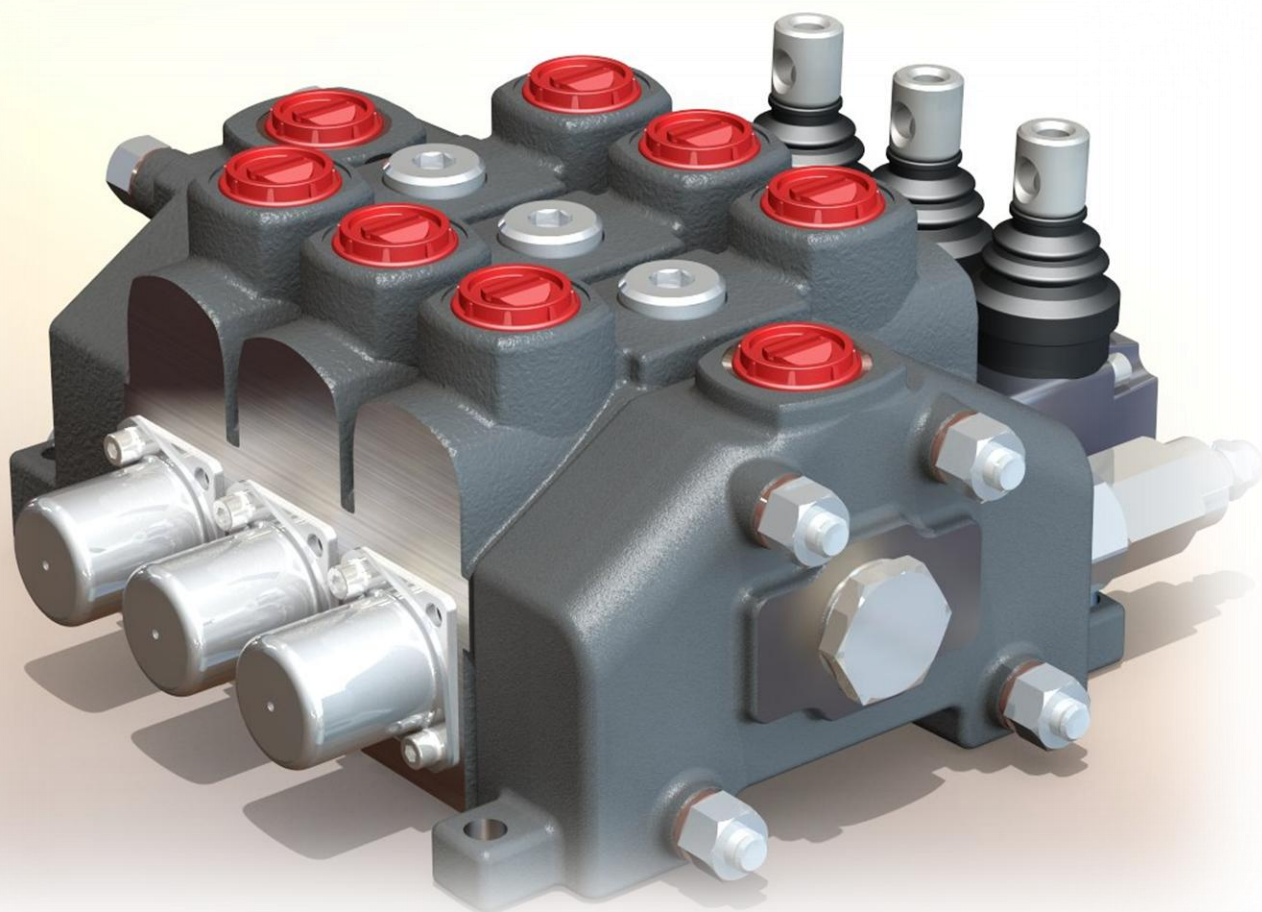




SECTIONAL VALVE

KV 18



GENERAL FEATURES

Standard Material Specifications

- High strength cast iron
- Hard chrome plated interchangeable spools
- Steel spring caps
- Aluminum lever caps
- NBR seals

Standard Features

- Parallel circuit
- Adjustable main relief valve
- Load hold check valve in each section
- Double action

Optional Features

- Series, tandem circuits
- Variety of spool types
- Closed center
- Carry-over option
- Service valves
- Single action

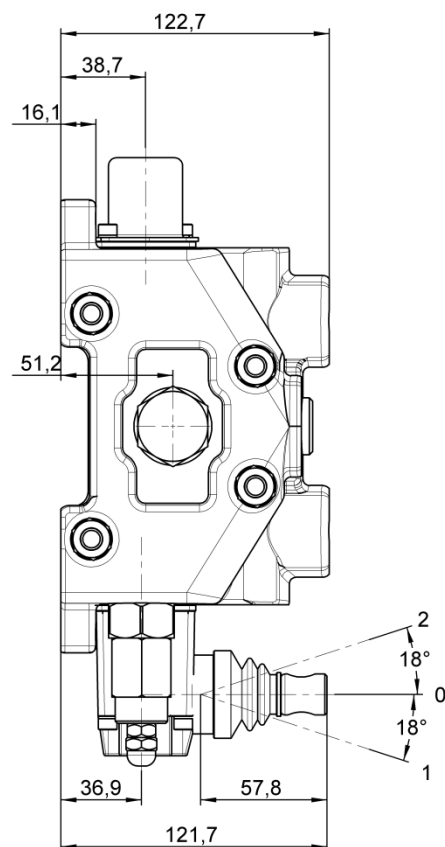
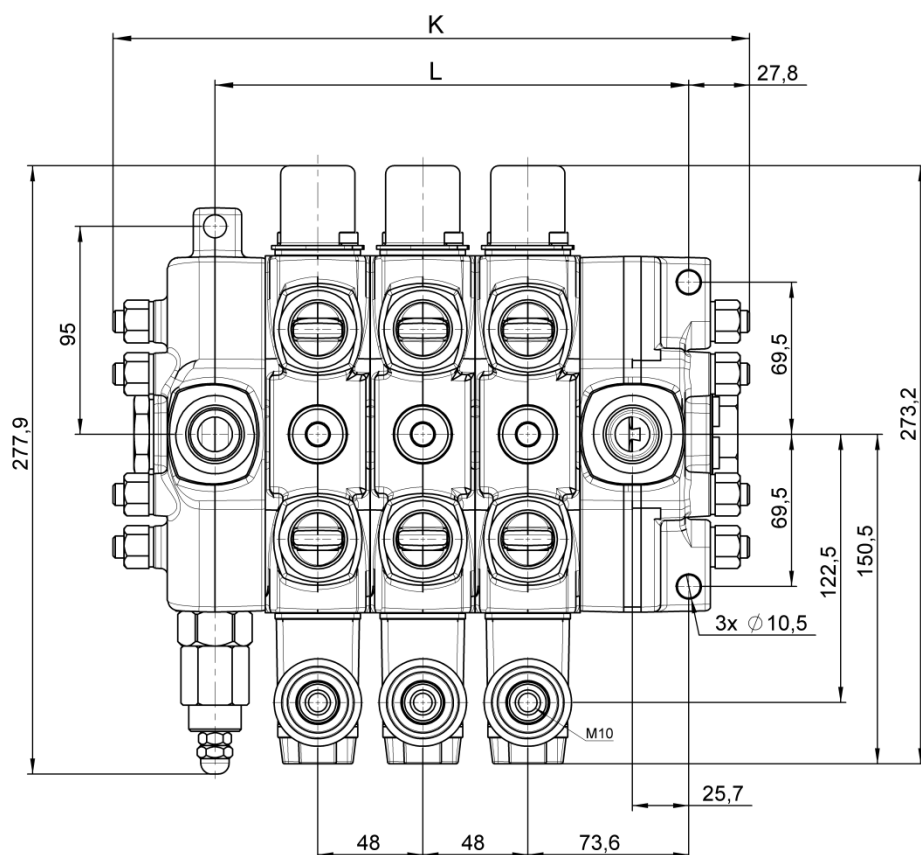
TECHNICAL SPECIFICATIONS

Number of spools	1-10 (Please ask for special orders more than 10 spools)
Nominal flow	100lt/min
Max. Operating pressure	320 Bar
Max. Back pressure	30 Bar
Tie rod tightening torque	30 Nm
Internal leakage (at 100 Bar; 32 cSt,	4 to 9 cc/min

WORKING CONDITIONS

Recommended oil viscosity range	10 cSt to 75 cSt
Recommended oil filtering	$\beta_{10} \geq 75$
Recommended fluid temperature range	-20 to +80
Environmental temperature range	-35 to +60
Max. Contamination level	Class 9 (NAS 1638) 19/16 (ISO 4406)

DIMENSIONAL DATA

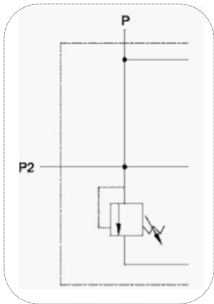
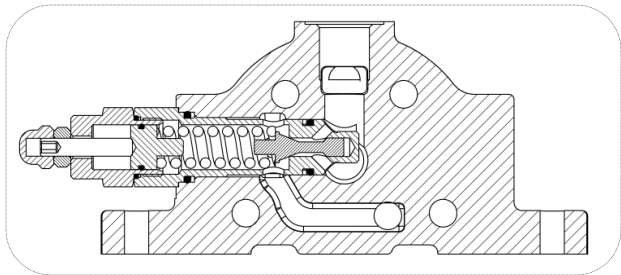


Type	L (mm)	K (mm)	W (kg)
KV 18/1	121	195	14,80
KV 18/2	169	243	20,00
KV 18/3	217	291	25,20
KV 18/4	265	339	30,40
KV 18/5	313	387	35,60
KV 18/6	361	435	40,80
KV 18/7	409	483	46,00
KV 18/8	457	531	51,20
KV 18/9	505	579	56,40

INLET COVER

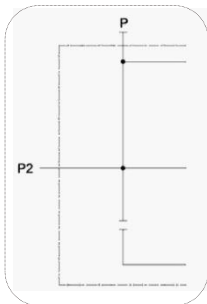
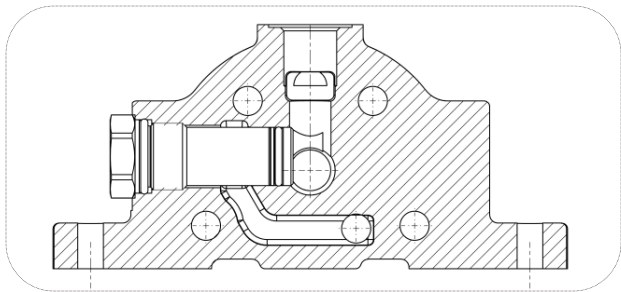
STANDARD THREADS	
CODE	P
C	G ¾

MAIN RELIEF VALVE



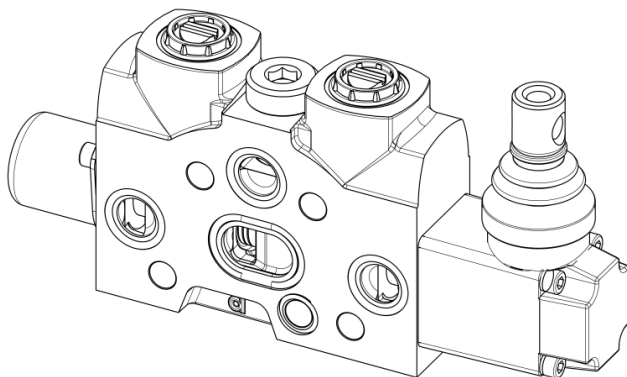
CODE : R

NO MAIN RELIEF VALVE



CODE : Y

WORKING SECTION



STANDARD THREADS

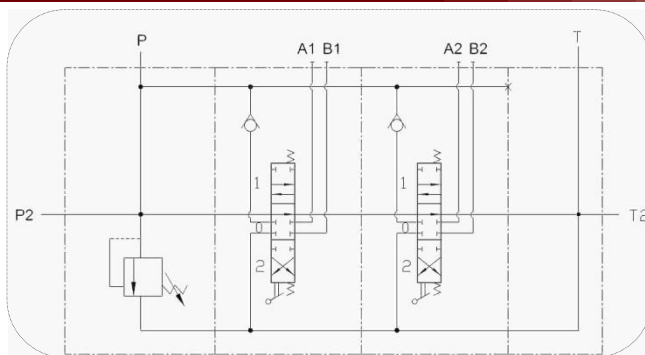
CODE

A/B

C

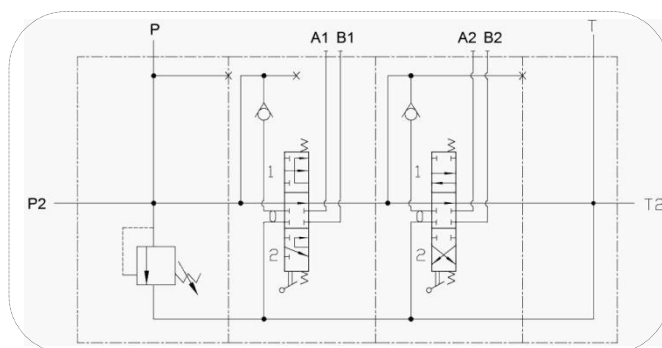
G $\frac{3}{4}$

PARALLEL CIRCUIT



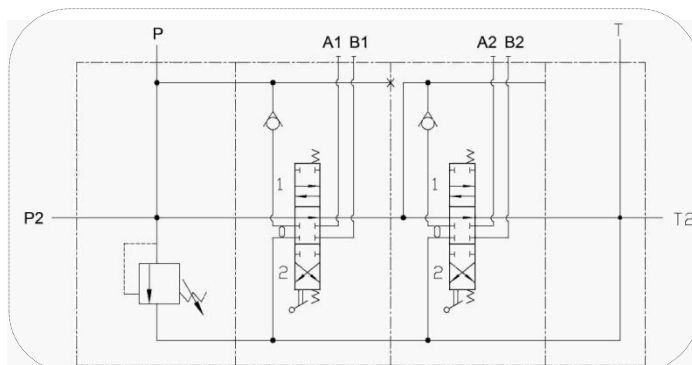
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SERIES CIRCUIT



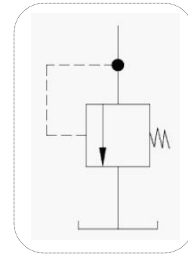
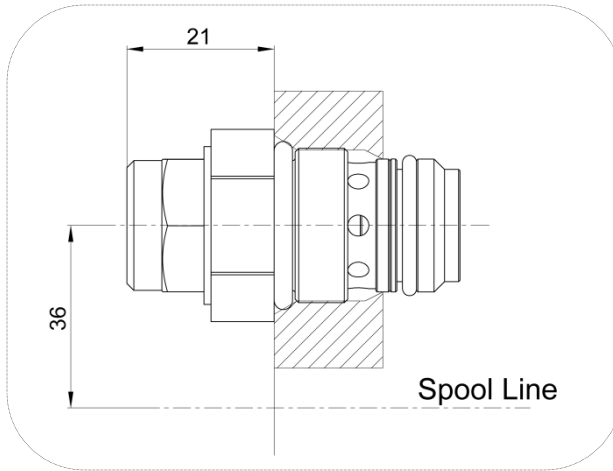
CODE : S

TANDEM CIRCUIT

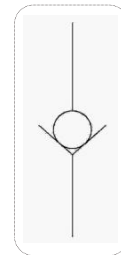
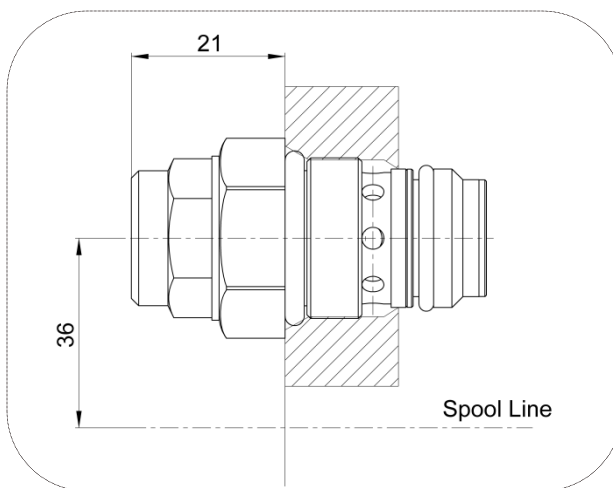


CODE : T

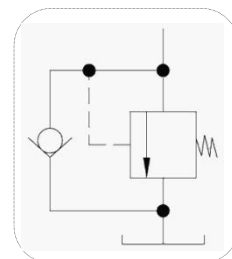
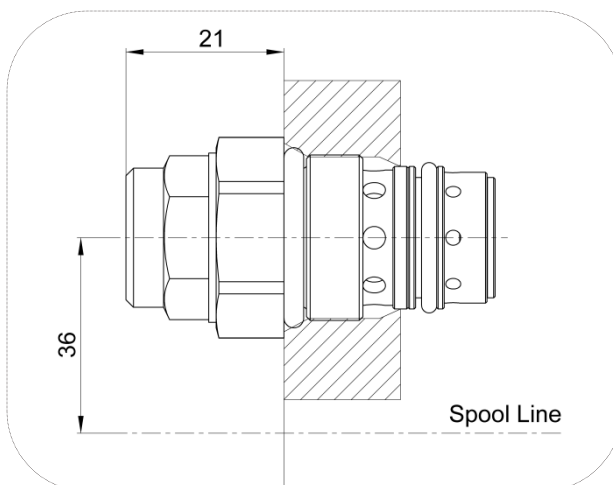
ANTISHOCK VALVES



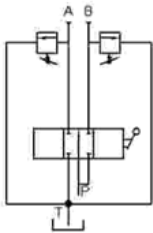
ANTICAVITATION VALVES



ANTISHOCK ANTICAVITATION VALVES

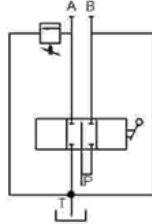


SERVICE VALVES CODING



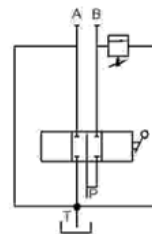
CODE: V1

Antishock
valves in
ports A
and B



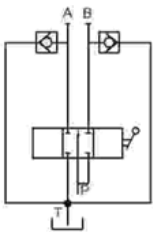
CODE: V2

Antishock
valve in
port A



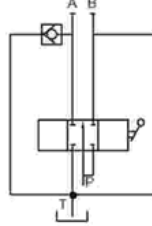
CODE: V3

Antishock
valve in
port B



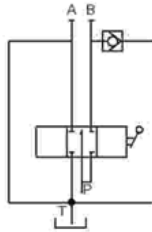
CODE: V4

Anticavitation
valves in
ports A and
B



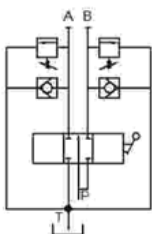
CODE: V5

Anticavitation
valve in
port A



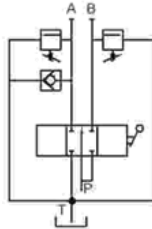
CODE: V6

Anticavitation
valve in
port B



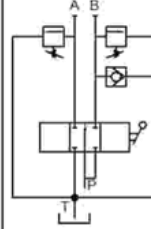
CODE: V7

Antishock &
Anticavitation
valves in
ports A and
B



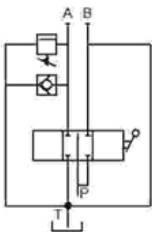
CODE: V8

Antishock &
Anticavitation
valve in port A
and
Antishock valve in
port B



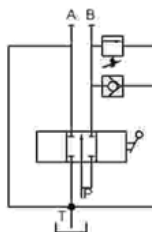
CODE: V9

Antishock &
Anticavitation
valve in port B
and
Antishock valve in
port A



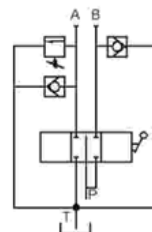
CODE: V10

Antishock &
Anticavitation
valve in port A



CODE: V11

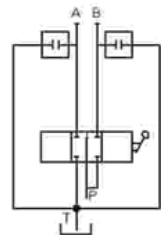
Antishock &
Anticavitation
valve in port B



CODE: V12

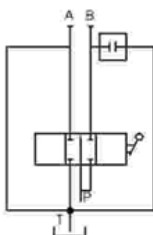
Antishock &
Anticavitation
valve in port A
and
Anticavitation
valve in port B

SERVICE VALVES CODING



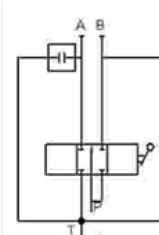
CODE: V13

Cavity-Plug in
ports A and B



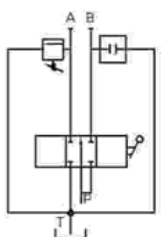
CODE: V14

Cavity-Plug in
port B



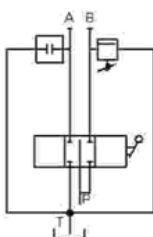
CODE: V15

Cavity-Plug in
port A



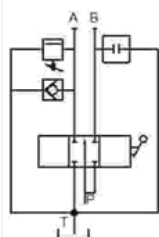
CODE: V17

Antishock valve in
port A
and Cavity-plug in
port B



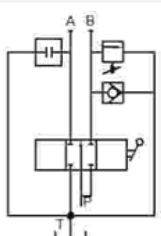
CODE: V18

Cavity-plug in port
A and Antishock
valve in port B



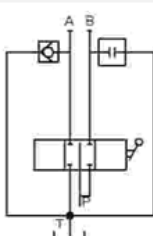
CODE: V19

Antishock &
Anticavitation valve
in port A and
Cavity-plug in port B



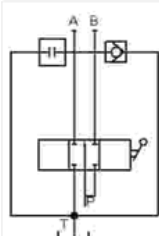
CODE: V20

Cavity-plug in port
A and Antishock &
Anticavitation
valve in port B



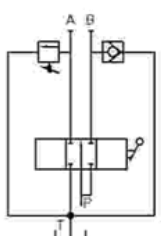
CODE: V21

Anticavitation
valve in port A
and Cavity-plug in
port B



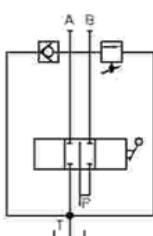
CODE: V22

Cavity-plug in port
A and
Anticavitation
valve in port B



CODE: V27

Antishock valve in
port A and
Anticavitation
valve in port B



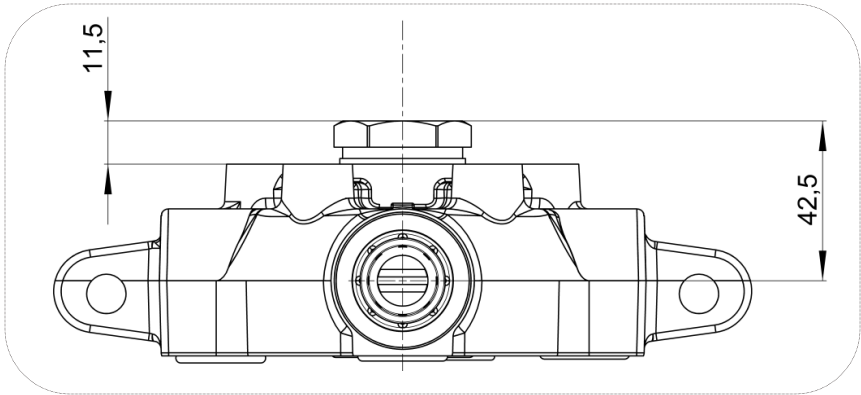
CODE: V28

Anticavitation
valve in port A and
Antishock valve in
port B

OUTLET SECTION

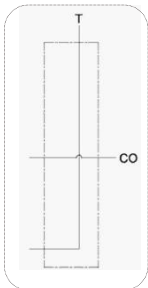
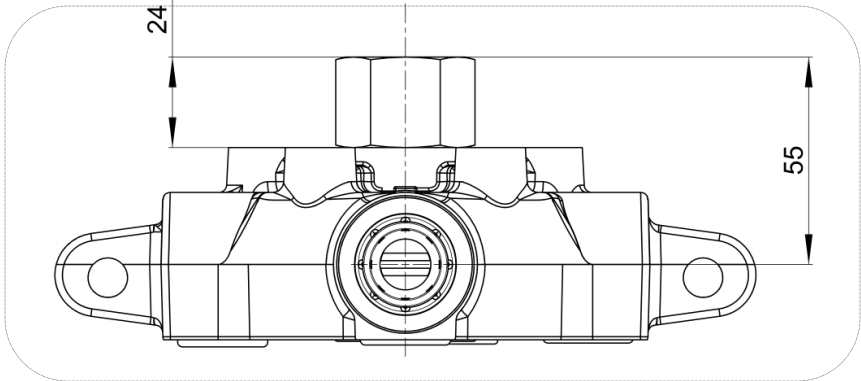
STANDARD THREADS	
CODE	T
C	G ¾

STANDARD



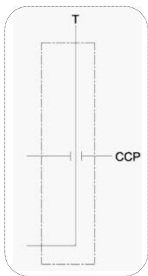
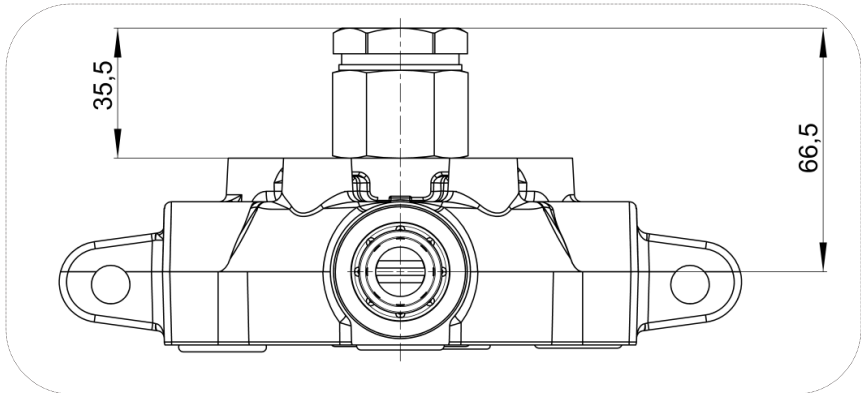
NO CODE

CARRY-OVER PLUG



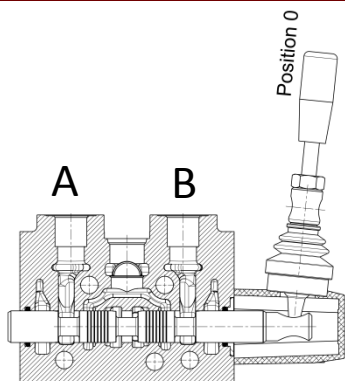
CODE : H

CLOSED CENTER PLUG

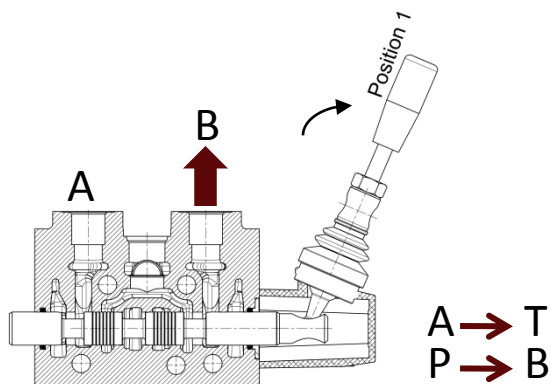


CODE : K

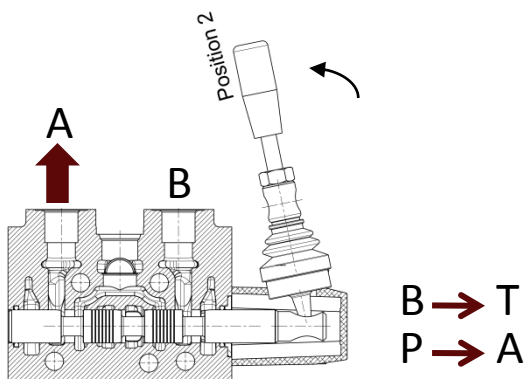
SPOOL CONTROL POSITIONS



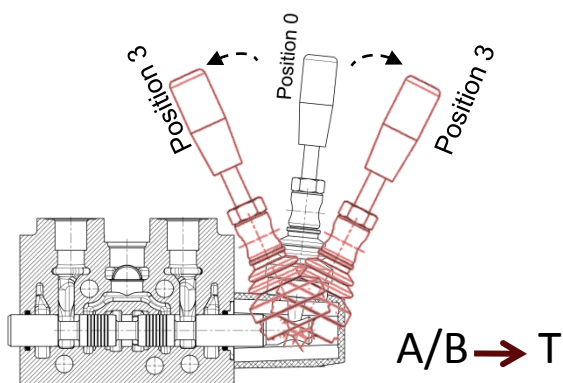
Spool-neutral position;
POSITION 0



Spool-out position;
POSITION 1



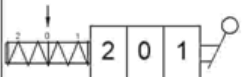
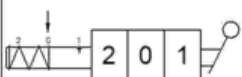
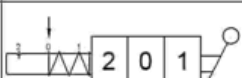
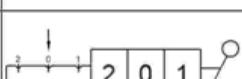
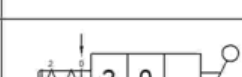
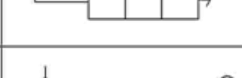
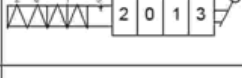
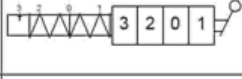
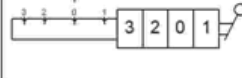
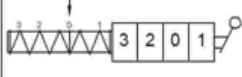
Spool-in position;
POSITION 2

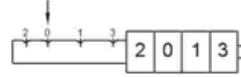
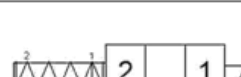
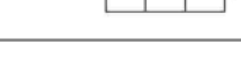
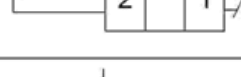
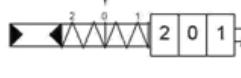
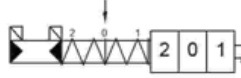


4 positions and 4th position can be
spool-in or spool-out position
optionally;

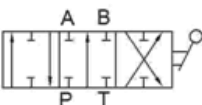
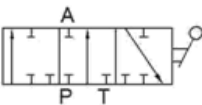
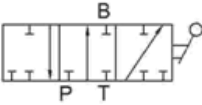
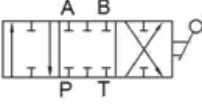
POSITION 3

SPOOL CONTROL CODING FOR KV15

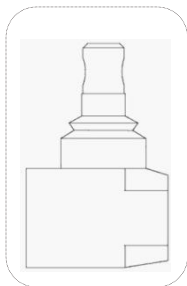
SC1		3 positions spring centered
SC2		3 positions spring centered, detent in 1st position
SC3		3 positions spring centered, detent in 2nd position
SC4		3 positions, detent in all positions
SC5		2 positions spring centered
SC6		2 positions spring centered
SC7		2 positions, detent in both positions
SC8		2 positions, detent in both positions
SC9		4 positions spring centered, detent in 3rd position
SC23		4 positions spring centered, detent in 3rd position
SC10		4 positions, detent in all positions
SC21		4 positions, all spring centered
SC22		4 positions, all spring centered

SC24		4 positions, detent in all positions
SC11		2 positions spring centered in 1st position
SC12		2 positions spring centered in 2nd position
SC13		2 positions, detent in both positions
SC15		3 positions pneumatic control
SC16		3 positions hydraulic control
SC17		3 positions electro-hydraulic control
SC18		3 positions microswitch operated in both positions
SC19		3 positions microswitch operated in 1st position
SC20		3 positions microswitch operated in 2nd position
SC28		3 positions, spring centered and detent with spring in all positions
SC29		Hydraulic Kick-out

SPOOL TYPES CODING FOR KV 15

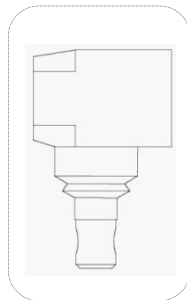
ST1		3 position Double acting spool
ST2		3 position Single acting on A side
ST3		3 position Single acting on B side
ST4		3 position Closed center spool
ST11		3 position Double acting spool A and B to tank
ST9		4 position Double acting with float on 4th position
ST10		4 position Double acting, regenerative in 4th position
ST5		3 position Single acting spool A open to tank
ST6		3 position Single acting spool B open to tank
ST7		3 position Double acting spool A to tank, B blocked
ST8		3 position Double acting spool B to tank, A blocked
ST12		3 position Double acting spool P open to A and B in 2nd position

LEVER TYPES CODING FOR KV 15



NO CODE

Standard Lever

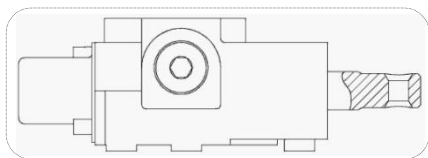


CODE : K1

Reverse Lever

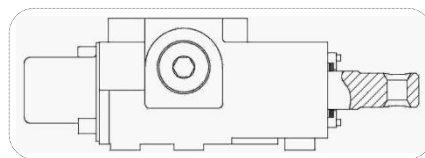
CODE : K2

No Lever



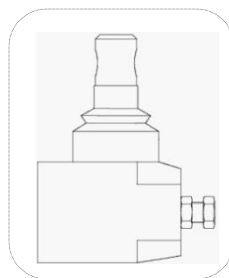
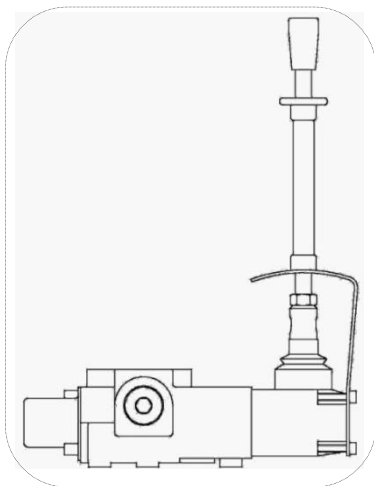
CODE : K3

Without Lever with
dustproof plate



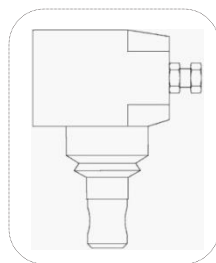
CODE : K4

Safety Lever



CODE : K5

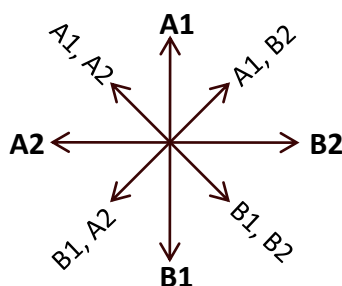
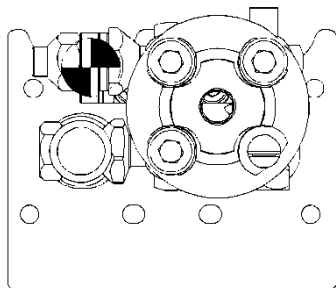
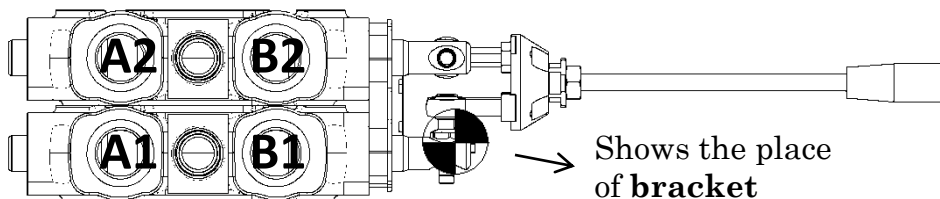
With Spool Limiter



CODE : K6

Reverse Lever with
Spool Limiter

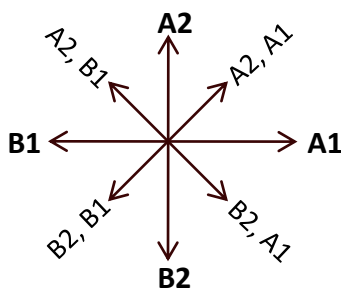
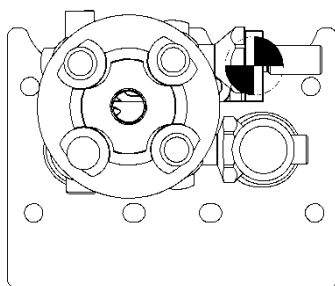
LEVER TYPES CODING FOR KV 15



CODE : K7-A

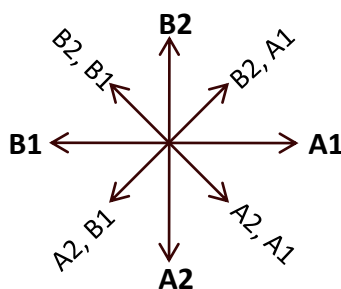
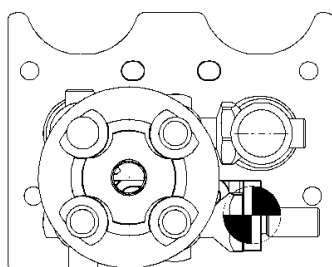
Manual joystick for 2 spools,
bracket placed on top-left

* If not specified this code will
be standard



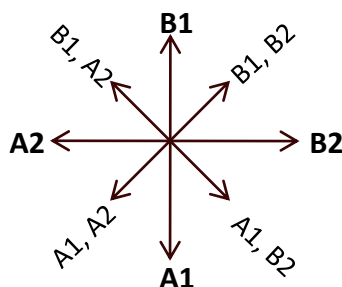
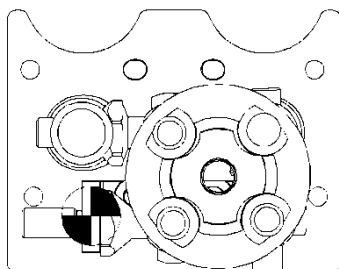
CODE : K7-B

Manual joystick for 2 spools,
bracket placed on top-right



CODE : K7-C

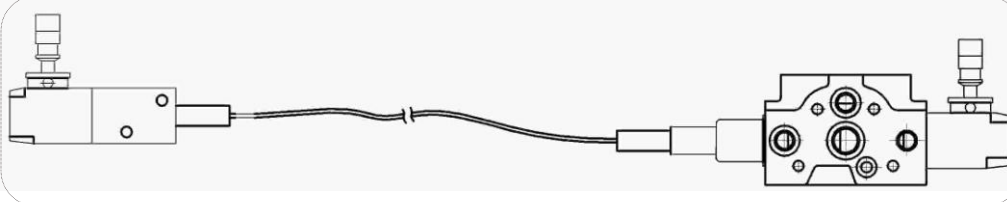
Manual joystick for 2 spools,
bracket placed on down-right



CODE : K7-D

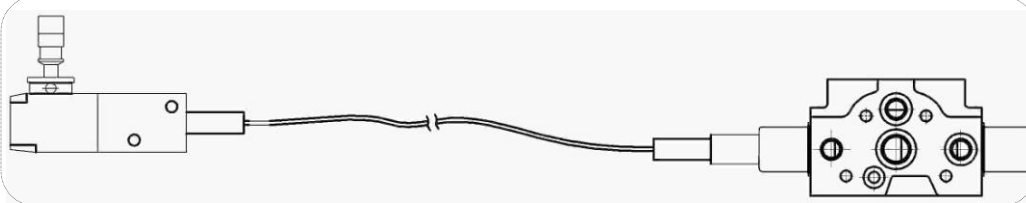
Manual joystick for 2 spools,
bracket placed on down-left.

LEVER TYPES CODING FOR KV 15



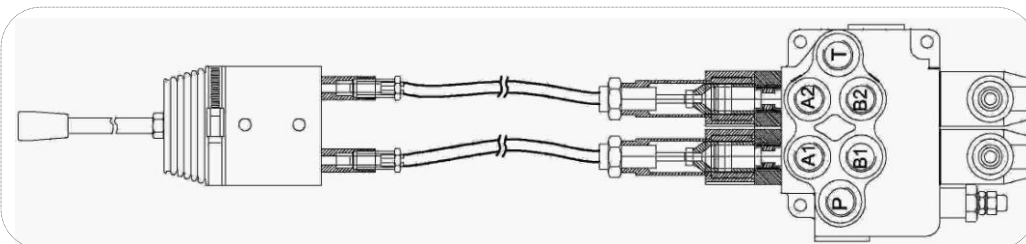
CODE : K8

Cable remote control on spring cap side



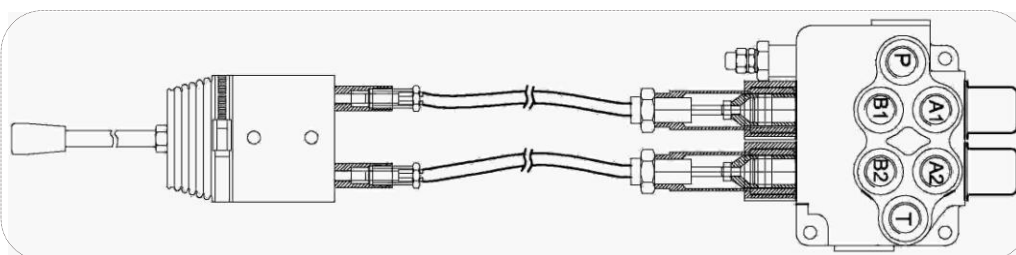
CODE : K9

Cable remote control on lever cap side



CODE : K10

Remote joystick control on spring cap side



CODE : K11

Remote joystick control on lever cap side

AN ORDERING EXAMPLE

INLET				FIRST SECTION			SECOND SECTION					THIRD SECTION				OUTLET	
KV18		3	C - R(200)	C - SC4	ST1	C - SC4	ST1 - K3	V2(A200)		C - SC1	SC15	ST4	C - H				
1	2	3	4	3	5	3	5	6	7	8	3	5	5	6	3	9	

1 Valve Type

2 Number Of Spools (from 1 to 8 spools)

3 Port Threads
(P, A/B, T) C : G $\frac{3}{4}$

4 Main Relief Valve
Y : Without main relief valve
R : With main relief valve
(indicate pressure setting)

5 Spool Controls and Actuators
See page 11
(if necessary indicate more than one spool control or actuator)

6 Spool Types
See page 12

7 Lever Types
See page 13-15

8 Service Valves
See page 7-8
(indicate requested pressure setting for each port separately
if required in both A and B ports)

9 Outlet
No code for standard
H : High pressure carry-over
K : Plugged for closed center