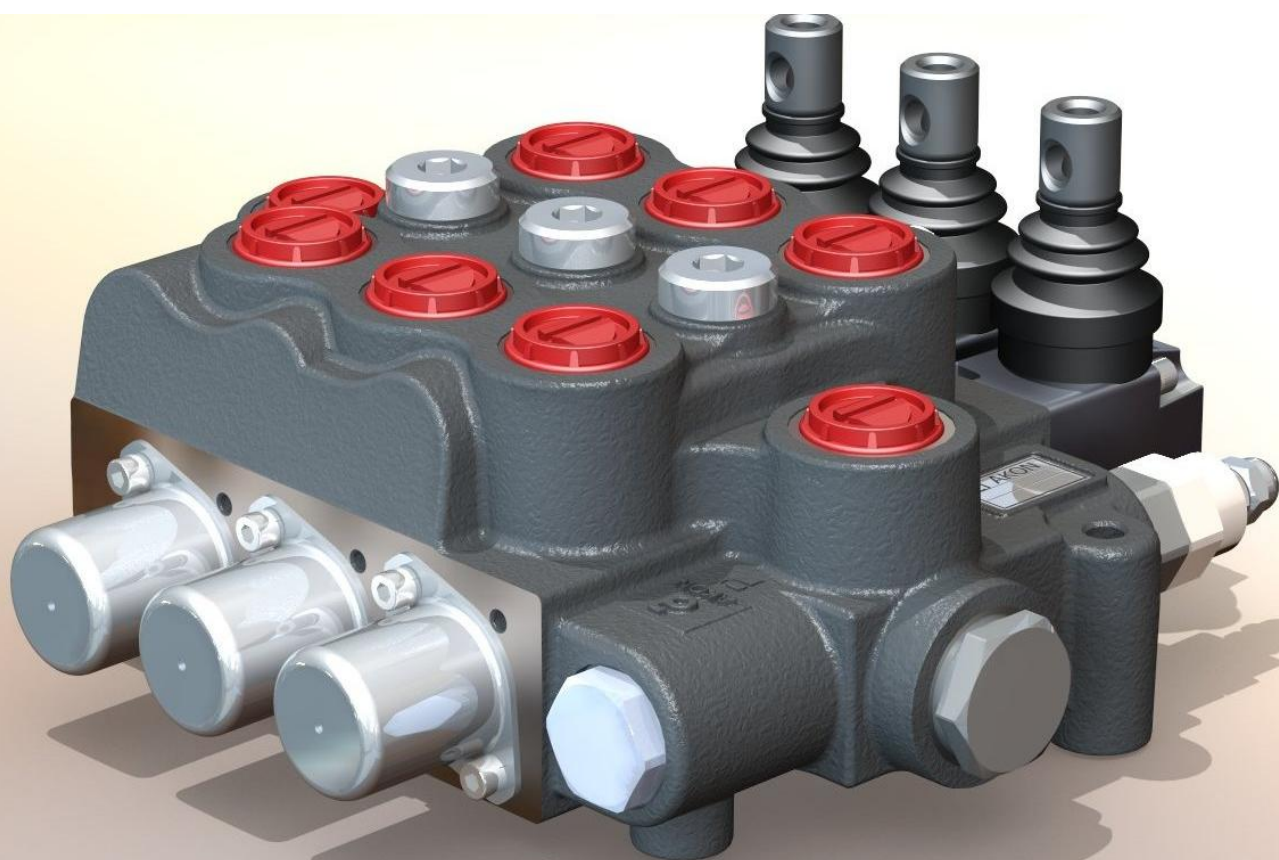




MONOBLOCK VALVE

KVM 16



GENERAL FEATURES

Standard Material Specifications

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

Standard Features

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

Optional Features

- Variety of spool types
- Closed center
- Carry-over option
- Single action
- Service valves

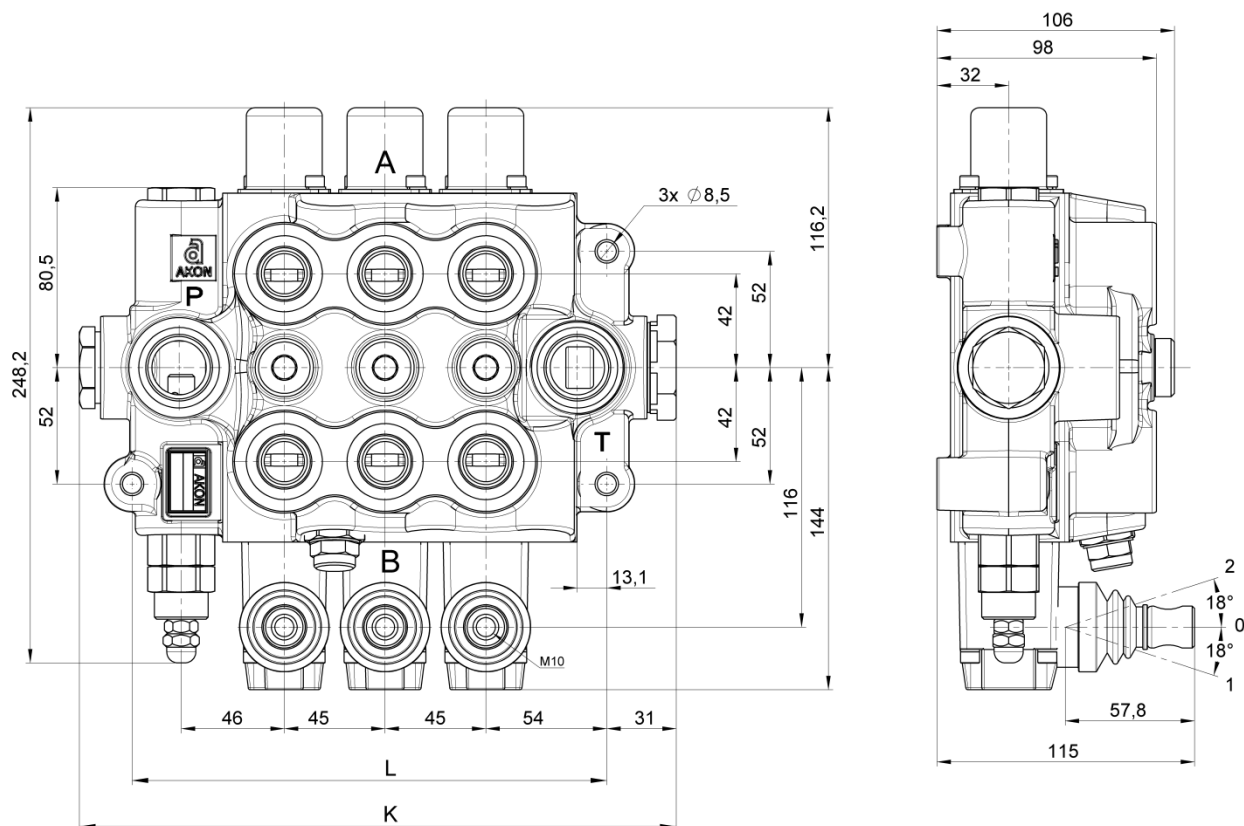
TECHNICAL SPECIFICATIONS

Number of spools	1-6
Nominal flow	100lt/min
Max. Operating pressure	350 Bar
Max. Back pressure	30 Bar
Internal leakage (at 100 Bar; 32 cSt, 40°C)	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

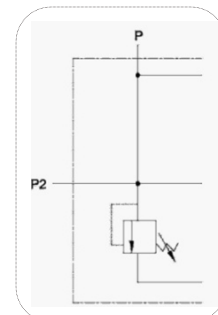
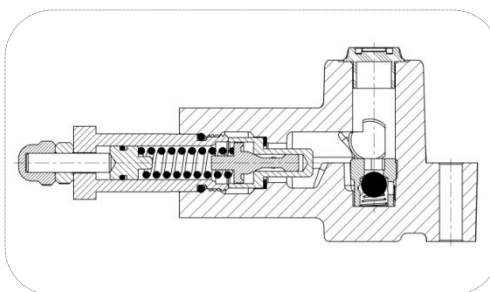
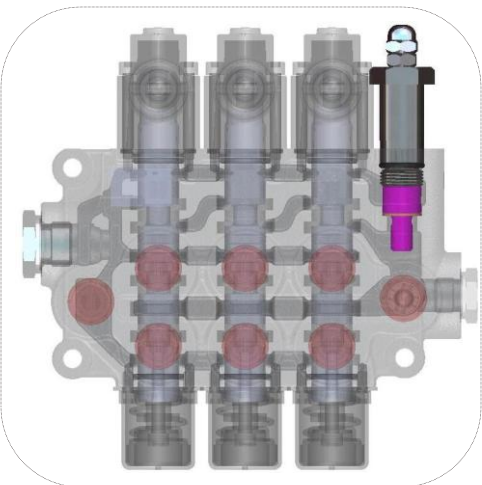


Type	L (mm)	K (mm)	W (kg)
KVM 16/1	122	176,5	8.50
KVM 16/2	167	221,5	13.00
KVM 16/3	212	266,5	17.50
KVM 16/4	257	311,5	22.00
KVM 16/5	302	356,5	26.50
KVM 16/6	347	401,5	31.00

STANDARD THREADS

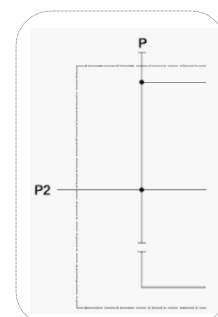
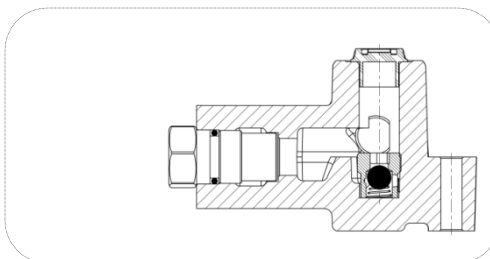
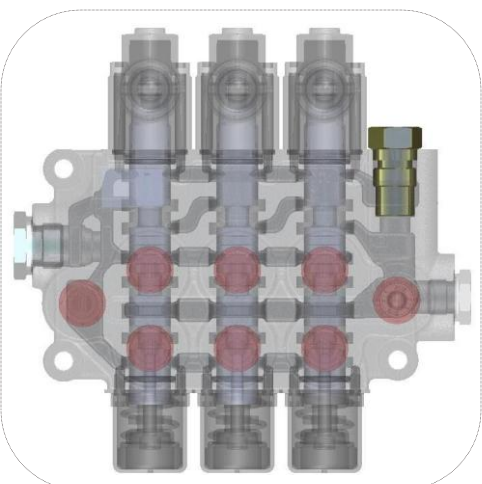
CODE	P	A/B	T	T1
C	G3/4	G3/4	G3/4	

MAIN RELIEF VALVE



CODE : R

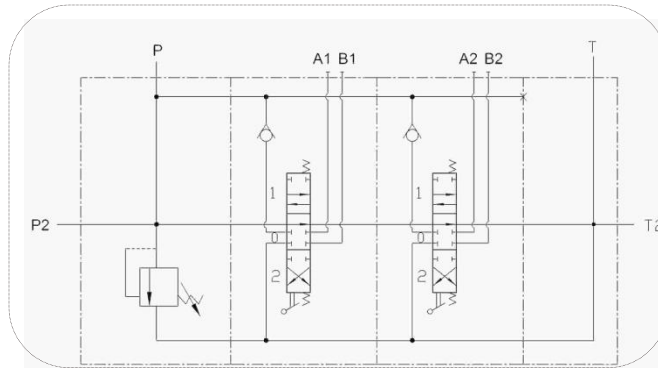
NO MAIN RELIEF VALVE



CODE : Y

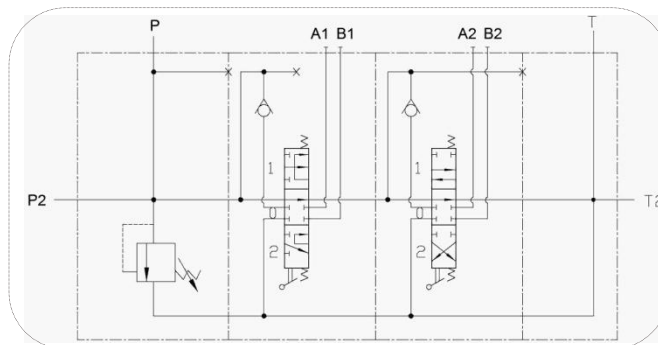
HYDRAULIC CIRCUITS

STANDARD CIRCUIT



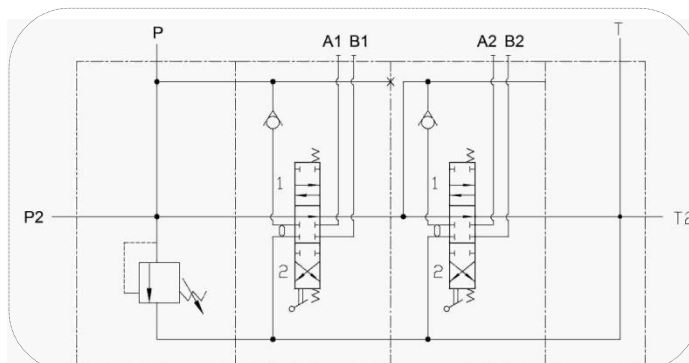
NO CODE

SERIES CIRCUIT



CODE : S

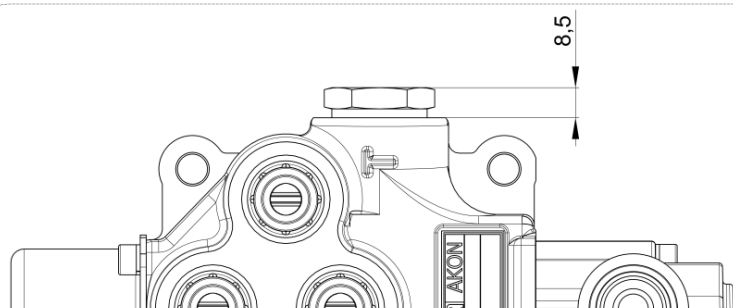
TANDEM CIRCUIT



CODE : T

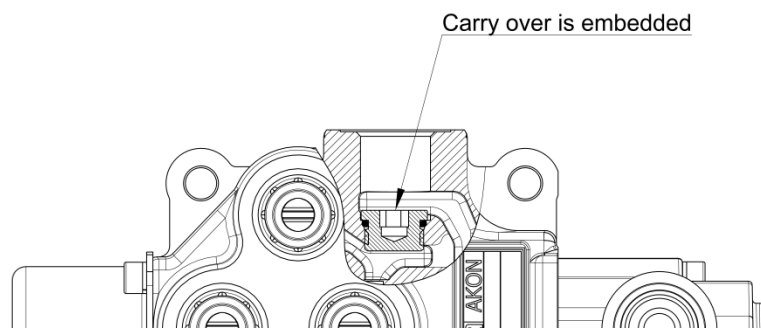
OUTLET OPTIONS

STANDARD



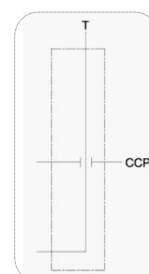
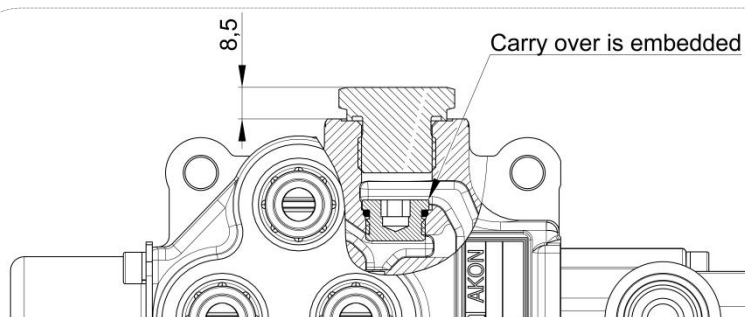
NO CODE

CARRY-OVER PLUG



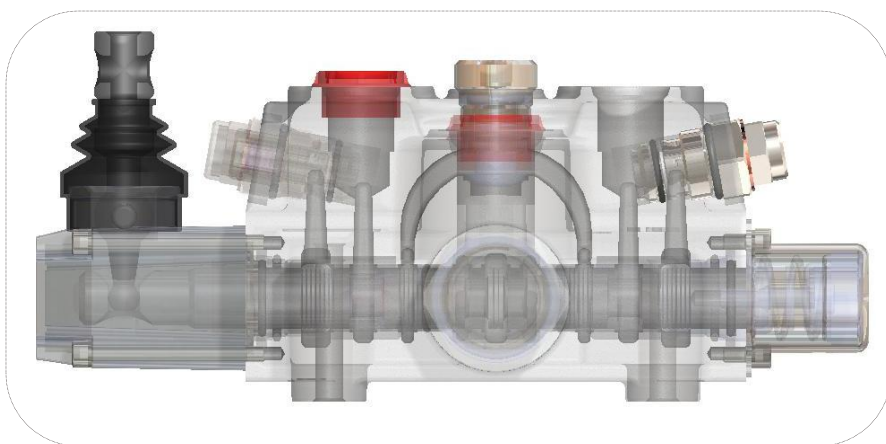
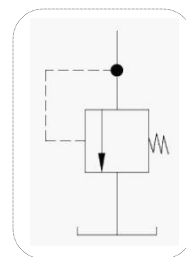
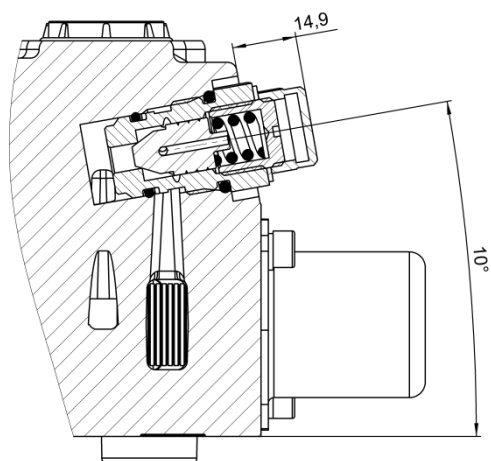
CODE : H

CLOSED CENTER PLUG

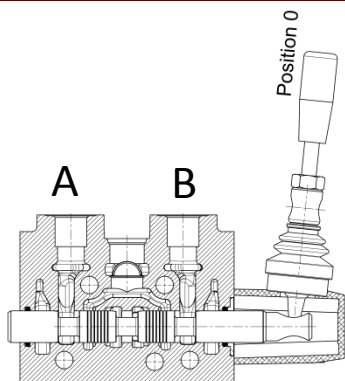


CODE : K

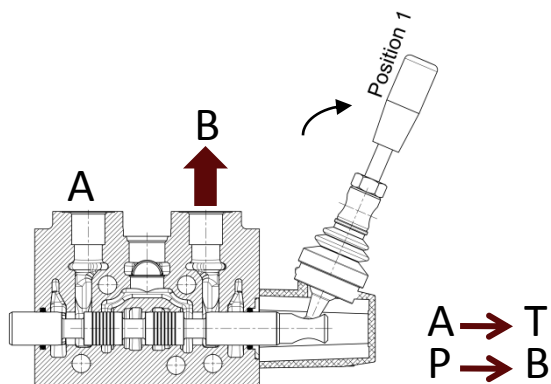
ANTISHOCK VALVES



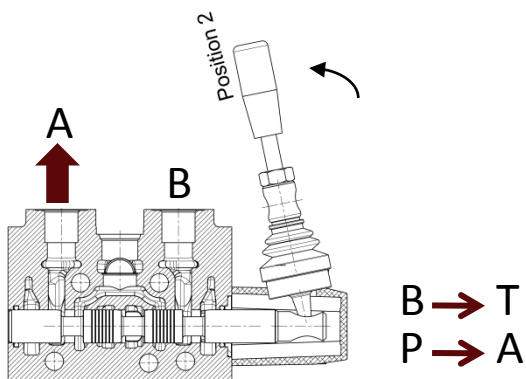
SPOOL CONTROL POSITIONS



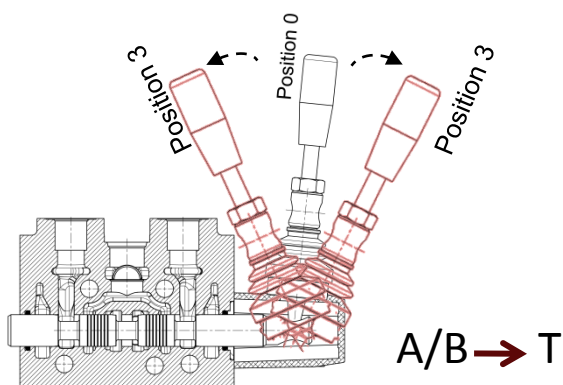
Spool-neutral position;
POSITION 0



Spool-out position;
POSITION 1



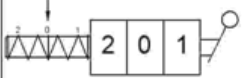
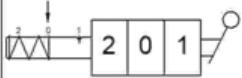
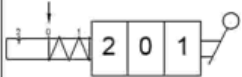
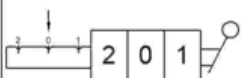
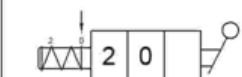
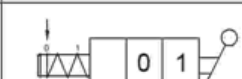
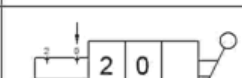
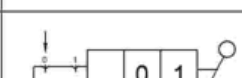
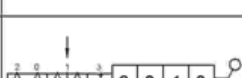
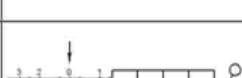
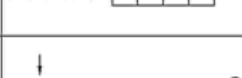
Spool-in position;
POSITION 2

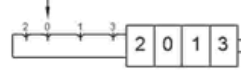
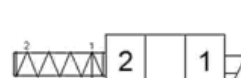
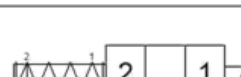
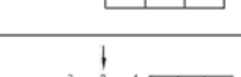
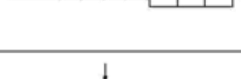
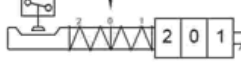
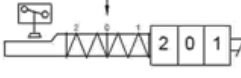
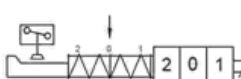
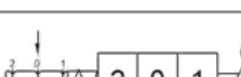


4 positions and 4th position can be
spool-in or spool-out position
optionally;

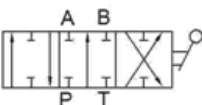
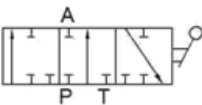
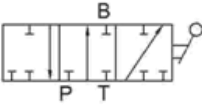
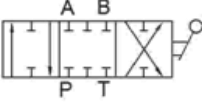
POSITION 3

SPOOL CONTROLS CODING FOR KVM15

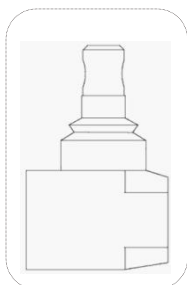
SC1		3 positions spring centered
SC2		3 positions spring centered, detent in 1st position
SC3		3 positions spring centered, detent in 2nd position
SC4		3 positions, detent in all positions
SC5		2 positions spring centered
SC6		2 positions spring centered
SC7		2 positions, detent in both positions
SC8		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 KVM 15

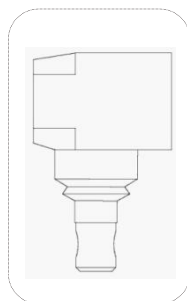
ST1		3 position Double acting spool
ST2		3 position Single acting on A side
ST3		3 position Single acting on B side
ST4		3 position Closed center spool
ST11		3 position Double acting spool A and B to tank
ST9		4 position Double acting with float on 4th position
ST10		4 position Double acting, regenerative 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 KVM 15



NO CODE

Standard Lever

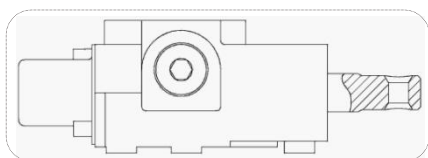


CODE : K1

Reverse Lever

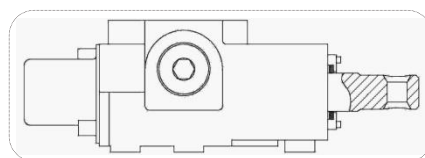
CODE : K2

No Lever



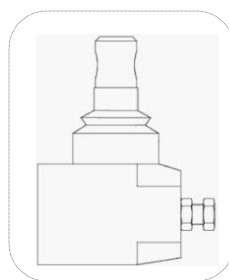
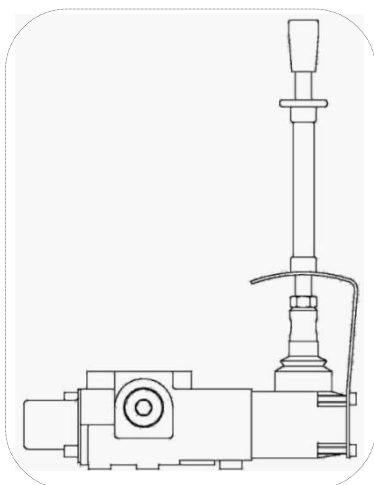
CODE : K3

Without Lever with
dustproof plate



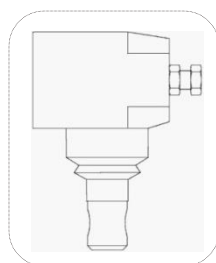
CODE : K4

Safety Lever



CODE : K5

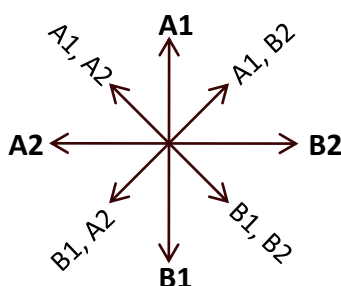
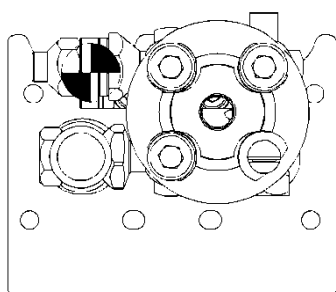
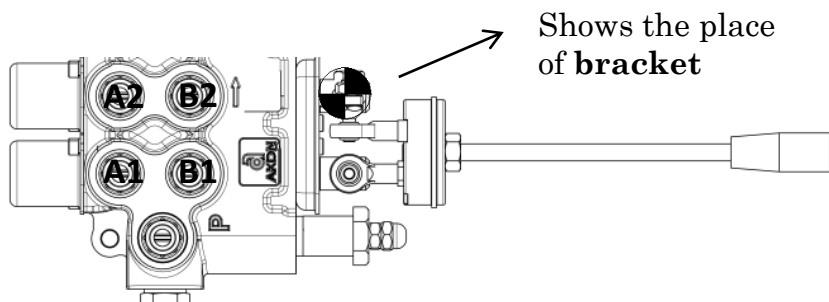
With Spool Limiter



CODE : K6

Reverse Lever with
Spool Limiter

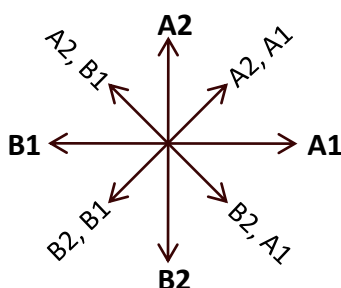
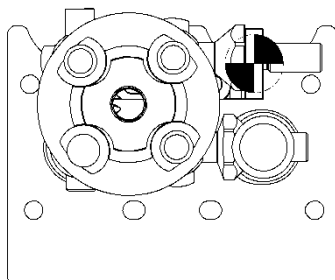
LEVER TYPES CODING FOR KVM 15



CODE : K7-A

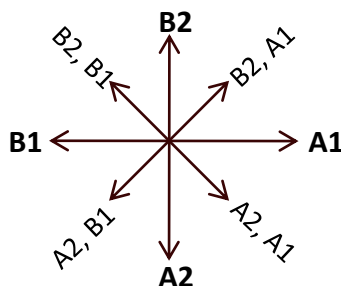
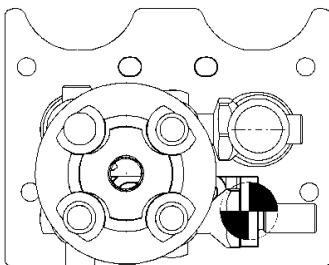
Manual joystick for 2 spools, bracket placed on top-left

* If not specified this code will be standard



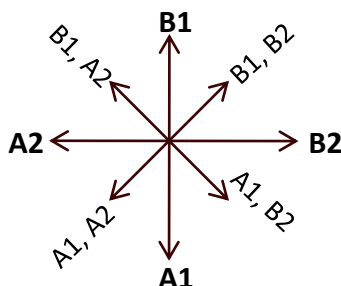
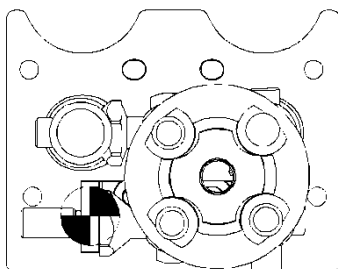
CODE : K7-B

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



CODE : K7-C

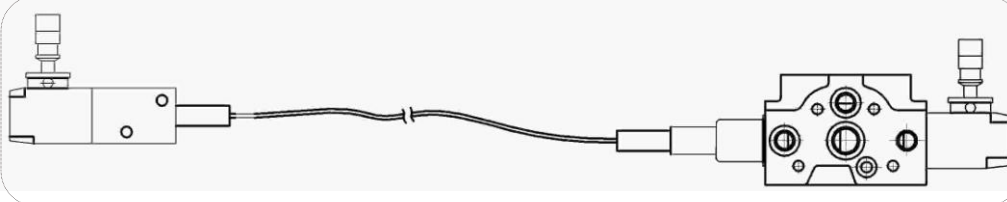
Manual joystick for 2 spools, bracket placed on down-right



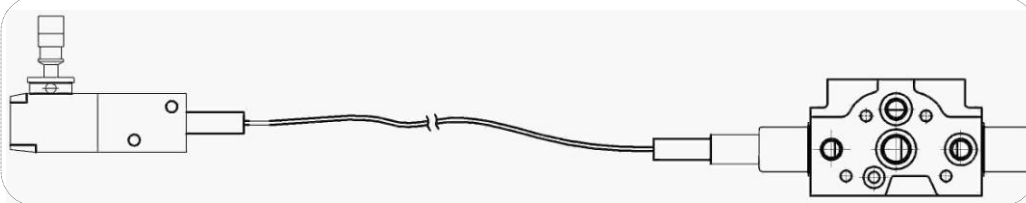
CODE : K7-D

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

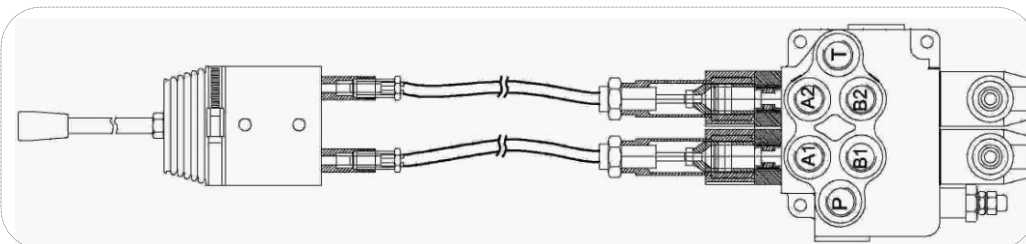
LEVER TYPES CODING FOR KVM 15

**CODE : K8**

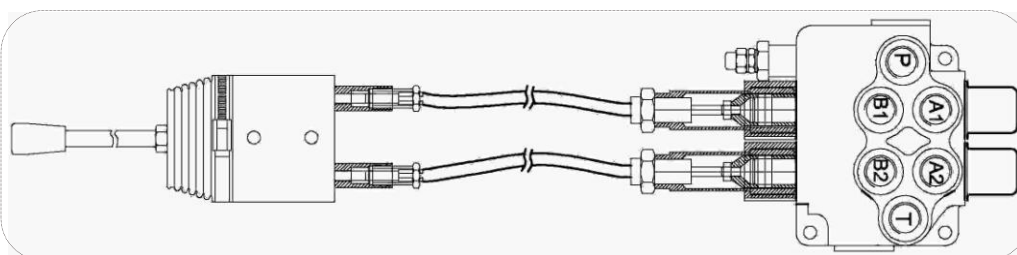
Cable remote
control on spring
cap side

**CODE : K9**

Cable remote
control on lever cap
side

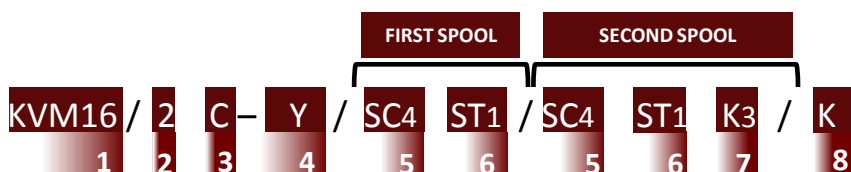
**CODE : K10**

Remote joystick
control on spring
cap side

**CODE : K11**

Remote joystick
control on lever
cap side

AN ORDERING EXAMPLE



1 Valve Type

2 Number Of Spools (from 1 to 6 spools) (please ask for more sections)

3 Port Threads
(P, A/B, T) C : G 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 8
(if necessary indicate more than one spool control or actuator)

6 Spool Types
See page 9

7 Lever Types
See page 10-13

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