



MĚŘÍCÍ A REGULAČNÍ TECHNIKA

THERMIS, spol. s r.o.

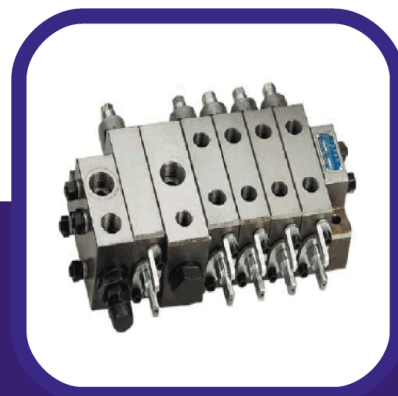
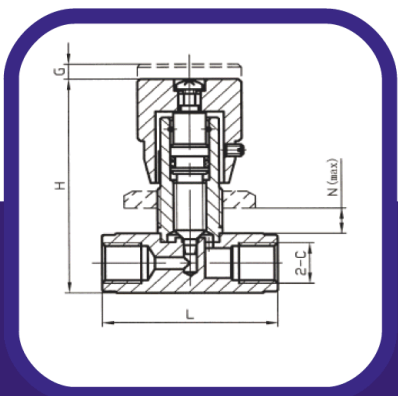
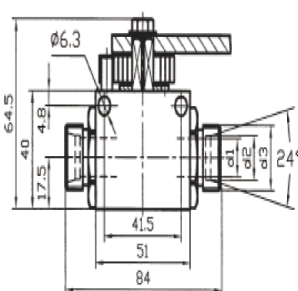
Mateř 14, Brno, Czech Republic

www.thermis.cz

HYDRAULIKA

VENTILY

KOHOUTY





CONTENT:

A. Hydraulic valves

- A.1. KHB- hydraulic pressure two-way ball valve
- A.2. KHB3K- hydraulic pressure three-way ball valve
- A.3. VH2V- high pressure ball valve
- A.4. VH3V- three way high pressure ball valve
- A.5. BKH- ball valve with SAE joint
- A.6. KHB(KHMF)- flange ball valve
- A.7. KHP(PKH)- two-way ball valve for manifold mounting
- A.8. BEH-SAE, KHS AE210- flange ball valve– SAE
- A.9. DKHB- mining ball valve
- A.10. KP-XC13- spring ball valve
- A.11. KHB- ball valve with pneumatic actuators

B. One-way valves

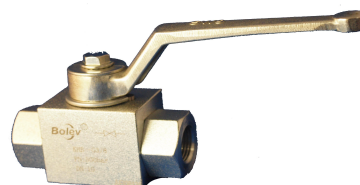
- B.1. V-series- one-way valve
- B.2. BLV-BFD, BLV-DBFD- counter balance valve BLV-BFD 10/35, BLV-DBFD 10/35
- B.3. VU/SF- shuttle valve

C. Throttle valves

- C.1. STU- throttle check valve
- C.2. STB- throttle valve

KHB

Hydraulic pressure two-way ball valve



Specification:

Hydraulic two-way ball valves are used mainly for distribution of hydraulic liquids as a closing element. The ball valve is made of steel or stainless steel, ball material is nickel-plated steel or stainless steel.

Model code:

KHB -- M27x1,5 -- 1 1 1 2 01 X -- *

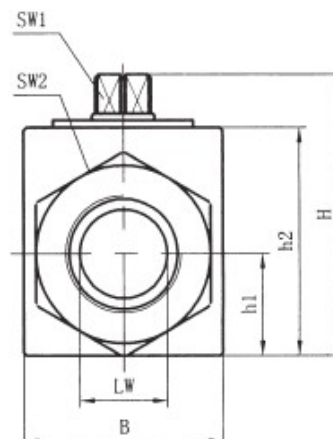
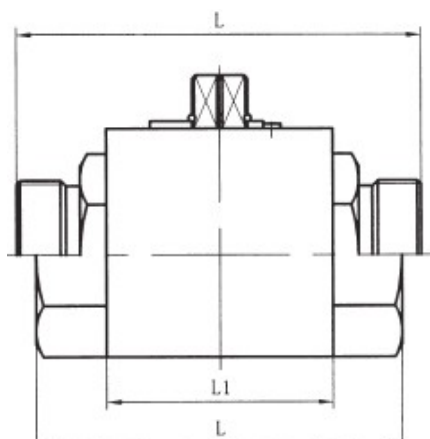
1 2 3 4 5 6 7 8 9

1. series code KHB
2. joint code: Gxx (G thread), xxLR (light), xxSR (heavy)
3. valve body material: 1-steel, 2-stainless steel
4. ball body material: 1-steel, 2-brass, 3-stainless steel
5. operating temperature: -25~+100°C, -30~+170°C
6. other airproof: 2-NBR, 4-FPM
7. handle type: 01-aluminium straight handle, 02-aluminium crooked handle, 03-casting zinc straight handle, 04-casting zinc crooked handle, 05-steel straight handle, 06-steel crooked handle, 09-without handle
8. Design number: to be decided by the manufacturer
9. Surface disposal: phosphoric polish, electroplated zinc

Symbol:

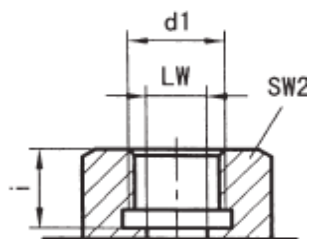


Drawing:

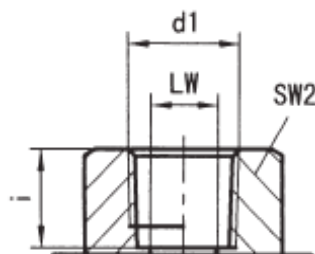


■ ■ ■ Dimensions:

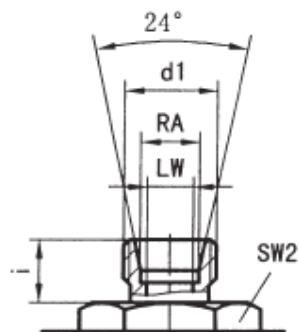
G/BSP



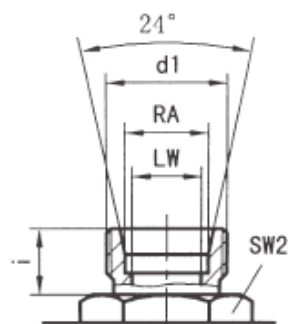
NPT



LR - light



SR - heavy



Type	PN(bar)	DN	LW	RA	d1	i	L	L1	B	H	h1	h2	SW1	SW2
KHB-G1/8	500	04	06	—	G1/8	10	69	40	26	45	13,5	33	09	22
KHB-G1/4	500	06	06	—	G1/4	14	69	40	26	45	13,5	33	09	22
KHB-G3/8	500	10	10	—	G3/8	14	72	42	32	49	16	36	09	27
KHB-G1/2	500	13	12	—	G1/2	16	83	48	35	49	17	40	09	30
KHB-G1/2	400	16	15	—	G1/2	16	83	48	38	61	19	45	09	32
KHB-G3/4	315	20	20	—	G3/4	18	95	60	48	70	25	55	12	41
KHB-G1	315	25	25	—	G1	21	113	65	57	79	28,5	64	12	50
KHB-G1 1/4	315	32	32	—	G1 1/4	22	110	84	75	101	37,5	84	14	60
KHB-G1 1/2	315	40	38	—	G1 1/2	24	130	91	85	112	42,5	95	14	70
KHB-G2	315	50	48	—	G2	26	140	100	105	131	52,5	112	14	80
Type	PN(bar)	DN	LW	RA	d1	i	L	L1	B	H	h1	h2	SW1	SW2
KHB-NPT1/8	500	04	06	—	NPT1/8	10	69	40	26	45	13,5	33	09	22
KHB-NPT1/4	500	06	06	—	NPT1/4	14	69	40	26	45	13,5	33	09	22
KHB-NPT3/8	500	10	10	—	NPT3/8	14	72	42	32	49	16	36	09	27
KHB-NPT1/2	500	13	12	—	NPT1/2	16	83	48	35	49	17	40	09	30
KHB-NPT1/2	400	16	15	—	NPT1/2	16	83	48	38	61	19	45	09	32
KHB-NPT3/4	315	20	20	—	NPT3/4	18	95	60	48	70	25	55	12	41
KHB-NTP1	315	25	25	—	NTP1	21	113	65	57	79	28,5	64	12	50
KHB-NTP1 1/4	315	32	32	—	NTP1 1/4	22	110	84	75	101	37,5	84	14	60
KHB-NTP1 1/2	315	40	38	—	NTP1 1/2	24	130	91	85	112	42,5	95	14	70
KHB-NTP2	315	50	48	—	NTP2	26	140	100	105	131	52,5	112	14	80
Type	PN(bar)	DN	LW	RA	d1	i	L	L1	B	H	h1	h2	SW1	SW2
KHB-06LR	500	04	04	06	M12x1,5	10	67	40	26	45	13,5	33	09	22
KHB-08LR	500	06	06	08	M14x1,5	10	67	40	26	45	13,5	33	09	22
KHB-10LR	500	08	08	10	M16x1,5	11	74	42	32	49	16	36	09	27
KHB-12LR	500	10	10	12	M18x1,5	11	74	42	32	49	16	36	09	27
KHB-15LR	500	13	12	15	M22x1,5	12	82	48	35	53	17	40	09	30
KHB-15LR	500	12	12	15	M22x1,5	12	82	48	38	61	19	45	09	32
KHB-18LR	500	13	12	18	M26x1,5	12	82	48	35	53	17	40	09	30
KHB-18LR	400	16	15	18	M26x1,5	12	82	48	38	61	19	45	09	32
KHB-22LR	315	20	19	22	M30x2	14	101	60	48	70	25	55	12	41
KHB-28LR	315	25	24	28	M36x2	14	108	65	57	79	28,5	64	12	50
KHB-35LR	315	32	30	35	M45x2	16	141	84	75	101	37,5	84	14	60
KHB-42LR	315	40	36	42	M52x2	16	162	91	85	112	42,5	95	14	70
Typ	PN(bar)	DN	LW	RA	d1	i	L	L1	B	H	h1	h2	SW1	SW2
KHB-08SR	500	04	05	08	M16x1,5	12	73	40	26	45	13,5	33	09	22
KHB-10SR	500	06	06	10	M18x1,5	12	73	40	26	45	13,5	33	09	22
KHB-12SR	500	08	08	12	M20x1,5	12	76	42	32	49	16	36	09	27
KHB-14SR	500	10	10	14	M22x1,5	14	80	42	32	49	16	36	09	27
KHB-16SR	500	13	12	16	M24x1,5	14	86	48	35	53	17	40	09	30
KHB-16SR	500	12	12	16	M24x1,5	14	86	48	38	61	19	45	09	32
KHB-20SR	500	13	12	20	M30x2	16	90	48	35	53	17	40	09	30
KHB-20SR	400	16	15	20	M30x2	16	90	48	38	61	19	45	09	32
KHB-25SR	315	20	20	25	M36x2	18	109	60	48	70	25	55	12	41
KHB-30SR	315	25	25	30	M42x2	20	120	65	57	79	28,5	64	12	50
KHB-38SR	315	32	30	38	M52x2	22	153	84	75	101	37,5	84	14	60

KHB3K

Hydraulic three-way ball valve



Specifikace:

Hydraulic two-way ball valves are used mainly for distribution of hydraulic liquids as a closing fitting. The ball valve is made of steel or stainless steel, the ball material is nickel-plated steel or stainless steel. They are produced in two designs – opened „T“ or closed „L“. while using „L“ type, middle position means „all closed“, range of handle turn is 90°. while using „T“ type, middle position means „all connected“, range of handle turn is 180°.

Model code:

KHB3K -- M2x1,5 -- 1 1 1 2 01 X -- *

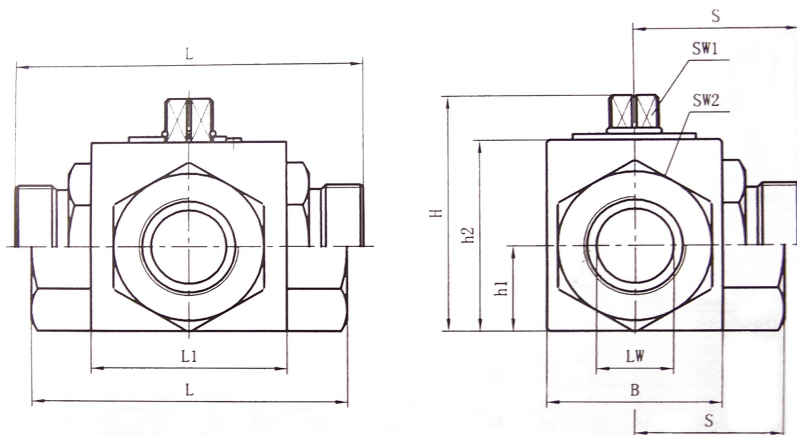
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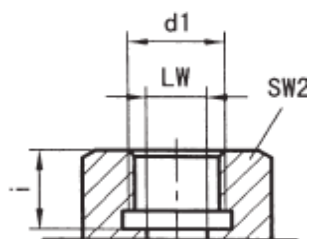
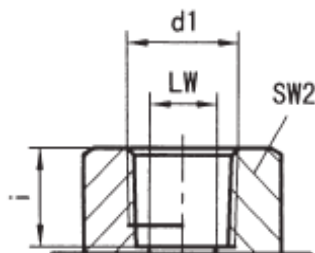
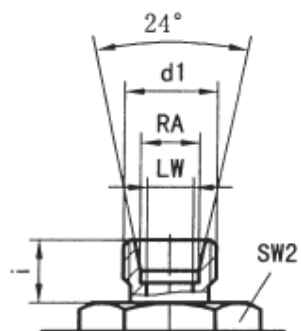
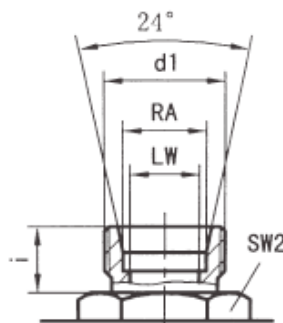
1. series code: KHB3K
2. joint code: Gxx (G thread), xxLR (light), xxSR (heavy)
3. valve body material: 1-steel, 2-stainless steel
4. ball body material: 1-steel, 2-brass, 3-stainless steel
5. operating temperature: -25~+100°C, -30~+170°C
6. other airproof: 2-NBR, 4-FPM
7. handle type: 01-aluminium straight handle, 02-aluminium crooked handle, 03-zinc casting straight handle, 04-zinc casting crooked handle, 05-steel straight handle, 06-steel crooked handle, 09-without handle
8. design number: to be decided by the manufacturer
9. surface disposal: phosphoric polish, electroplated zinc

Symbol:



Drawing:



Dimensions:
G/BSP

NPT

LR - light

SR - heavy


Type	PN(bar)	DN	LW	RA	d1	i	L	L1	B	H	h1	h2	SW1	SW2	S
KHB3K-G1/8	500	04	06	—	G1/8	10	69	40	26	45	13,5	33	09	22	35
KHB3K-G1/4	500	06	06	—	G1/4	14	69	40	26	45	13,5	33	09	22	35
KHB3K-G3/8	500	10	10	—	G3/8	14	72	42	32	49	16	36	09	27	36
KHB3K-G1/2	500	13	12	—	G1/2	16	83	48	35	49	17	40	09	30	40
KHB3K-G1/2	400	16	15	—	G1/2	16	83	48	38	61	19	45	09	32	42
KHB3K-G3/4	315	20	20	—	G3/4	18	95	60	48	70	25	55	12	41	49
KHB3K-G1	315	25	25	—	G1	21	113	65	57	79	28,5	64	12	50	56,5
KHB3K-G1 1/4	315	32	32	—	G1 1/4	22	110	84	75	101	37,5	84	14	60	62,5
KHB3K-G1 1/2	315	40	38	—	G1 1/2	24	130	91	85	112	42,5	95	14	70	61
KHB3K-G2	315	50	48	—	G2	26	140	100	105	131	52,5	112	14	80	62,5
Type	PN(bar)	DN	LW	RA	d1	i	L	L1	B	H	h1	h2	SW1	SW2	S
KHB3K-NPT1/8	500	04	06	—	NPT1/8	10	69	40	26	45	13,5	33	09	22	35
KHB3K-NPT1/4	500	06	06	—	NPT1/4	14	69	40	26	45	13,5	33	09	22	35
KHB3K-NPT3/8	500	10	10	—	NPT3/8	14	72	42	32	49	16	36	09	27	36
KHB3K-NPT1/2	500	13	12	—	NPT1/2	16	83	48	35	49	17	40	09	30	40
KHB3K-NPT1/2	400	16	15	—	NPT1/2	16	83	48	38	61	19	45	09	32	42
KHB3K-NPT3/4	315	20	20	—	NPT3/4	18	95	60	48	70	25	55	12	41	49
KHB3K-NPT1	315	25	25	—	NPT1	21	113	65	57	79	28,5	64	12	50	56,5
KHB3K-NPT1 1/4	315	32	32	—	NPT1 1/4	22	110	84	75	101	37,5	84	14	60	62,5
KHB3K-NPT1 1/2	315	40	38	—	NPT1 1/2	24	130	91	85	112	42,5	95	14	70	61
KHB3K-NPT2	315	50	48	—	NPT2	26	140	100	105	131	52,5	112	14	80	62,5
Type	PN(bar)	DN	LW	RA	d1	i	L	L1	B	H	h1	h2	SW1	SW2	S
KHB3K-06LR	500	04	04	06	M12x1,5	10	67	40	26	45	13,5	33	09	22	33,5
KHB3K-08LR	500	06	06	08	M14x1,5	10	67	40	26	45	13,5	33	09	22	33,5
KHB3K-10LR	500	08	08	10	M16x1,5	11	74	42	32	49	16	36	09	27	37
KHB3K-12LR	500	10	10	12	M18x1,5	11	74	42	32	49	16	36	09	27	37
40KHB3K-15LR	500	13	12	15	M22x1,5	12	82	48	35	53	17	40	09	30	40
KHB3K-15LR	500	12	12	15	M22x1,5	12	82	48	38	61	19	45	09	32	40
KHB3K-18LR	500	13	12	18	M26x1,5	12	82	48	35	53	17	40	09	30	42
KHB3K-18LR	400	16	15	18	M26x1,5	12	82	48	38	61	19	45	09	32	42
KHB3K-22LR	315	20	19	22	M30x2	14	101	60	48	70	25	55	12	41	52
KHB3K-28LR	315	25	24	28	M36x2	14	108	65	57	79	28,5	64	12	50	54
KHB3K-35LR	315	32	30	35	M45x2	16	141	84	75	101	37,5	84	14	60	66
KHB3K-42LR	315	40	36	42	M52x2	16	162	91	85	112	42,5	95	14	70	78
Type	PN(bar)	DN	LW	RA	d1	i	L	L1	B	H	h1	h2	SW1	SW2	S
KHB3K-08SR	500	04	05	08	M16x1,5	12	73	40	26	45	13,5	33	09	22	37
KHB3K-10SR	500	06	06	10	M18x1,5	12	73	40	26	45	13,5	33	09	22	37
KHB3K-12SR	500	08	08	12	M20x1,5	12	76	42	32	49	16	36	09	27	38
KHB3K-14SR	500	10	10	14	M22x1,5	14	80	42	32	49	16	36	09	27	40
KHB3K-16SR	500	13	12	16	M24x1,5	14	86	48	35	53	17	40	09	30	44
KHB3K-16SR	500	12	12	16	M24x1,5	14	86	48	38	61	19	45	09	32	43,5
KHB3K-20SR	500	13	12	20	M30x2	16	90	48	35	53	17	40	09	30	44
KHB3K-20SR	400	16	15	20	M30x2	16	90	48	38	61	19	45	09	32	45,5
KHB3K-25SR	315	20	20	25	M36x2	18	109	60	48	70	25	55	12	41	56
KHB3K-30SR	315	25	25	30	M42x2	20	120	65	57	79	28,5	64	12	50	60
KHB3K-38SR	315	32	30	38	M52x2	22	153	84	75	101	37,5	84	14	60	72

VH2V

High pressure ball valve



Specification:

Hydraulic two-way ball valves are used mainly for distribution of hydraulic liquids as a closing fitting. The ball valve is made of steel or stainless steel, the ball material is nickel-plated steel or stainless steel. Mounting onto the flange or by screws.

Model code:

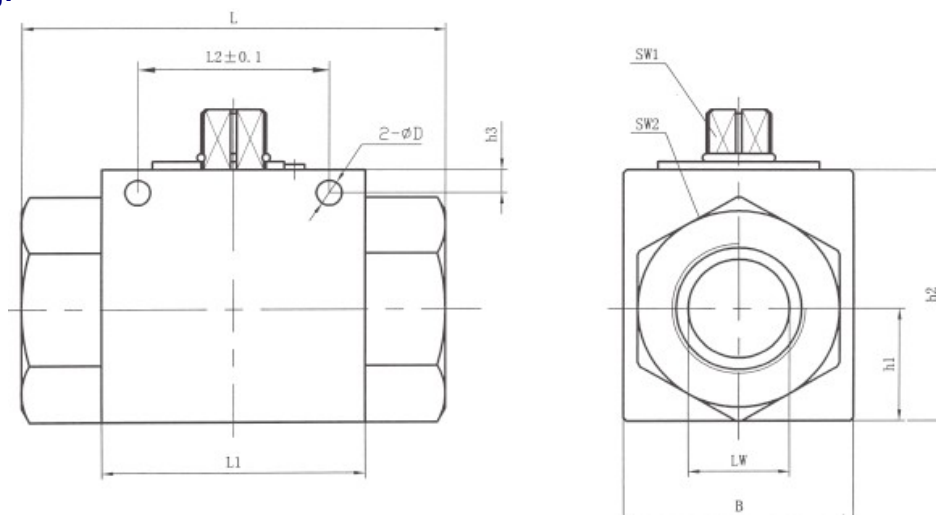
VH2V -- M27x1,5 -- 1 1 1 2 01 X -- *
 1 2 3 4 5 6 7 8 9

1. series code: VH2V
2. joint code: Gxx (G thread), xxLR (light, xxSR (heavy)
3. valve body material: 1-steel, 2-stainless steel
4. ball body material: 1-steel, 2-brass, 3-stainless steel
5. operating temperature: 1. -25~+100°C, 2. -30~+170°C
6. other airproof: 2-NBR, 4-FPM
7. handle type: 01-aluminium straight handle, 02-aluminium crooked handle, 03-zinc casting straight handle, 04-zinc casting crooked handle, 05-steel straight handle, 06-steel crooked handle, 09-without handle
8. design number: to be decided by the manufacturer
9. surface disposal: phosphoric polish, electroplated zinc

Symbol:

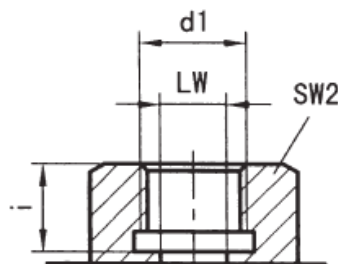


Drawing:



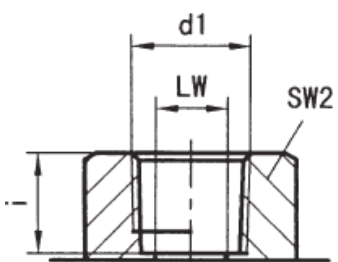
Dimensions:

G/BSP



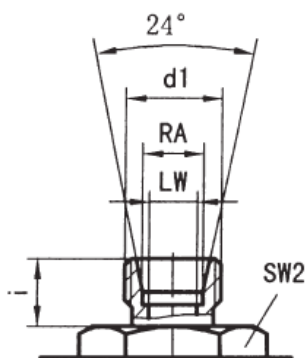
Type	PN(bar)	DN	LW	RA	d1	i	L	L1	B	L2	h1	h2	SW1	SW2	D	h3
VH2V-G1/4	500	06	06	/	G1/4	14	69	40	26	31,5	13,5	35	09	22	4,5	4,8
VH2V-G3/8	500	10	10	/	G3/8	14	72	42	32	31,5	16	40	09	27	5,3	5,8
VH2V-G1/2	500	13	12	/	G1/2	16	83	48	35	38,5	18	45	09	30	6,5	6
VH2V-G3/4	400	20	20	/	G3/4	18	93	60	50	48,5	23	58	12	41	6,5	6
VH2V-G1	350	25	25	/	G1	21	115	65	57	50,5	27,5	65	12	46	8,5	7

NPT



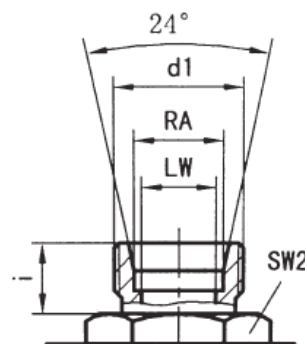
Type	PN(bar)	DN	LW	RA	d1	i	L	L1	B	L2	h1	h2	SW1	SW2	D	h3
VH2V-NPT1/4	500	06	06	/	NPT1/4	14	69	40	26	31,5	13,5	35	09	22	4,5	4,8
VH2V-NPT3/8	500	10	10	/	NPT3/8	14	72	42	32	31,5	16	40	09	27	5,3	5,8
VH2V-NPT1/2	500	13	12	/	NPT1/2	16	83	48	35	38,5	18	45	09	30	6,5	6
VH2V-NPT3/4	400	20	20	/	NPT3/4	18	95	60	50	48,5	23	58	12	41	6,5	6
VH2V-NPT1	350	25	23	/	NPT1	21	113	65	57	50,5	27,5	65	12	46	8,5	7

LR – light



Type	PN(bar)	DN	LW	RA	d1	i	L	L1	B	L2	h1	h2	SW1	SW2	D	h3
VH2V-08LR	500	06	06	08	M14x1,5	10	67	40	26	31,5	13,5	35	09	22	4,5	4,8
VH2V-12LR	500	10	10	12	M18x1,5	11	74	42	32	31,5	16	40	09	27	5,3	5,8
VH2V-15LR	500	13	12	15	M22x1,5	12	82	48	35	38,5	18	45	09	30	6,5	6
VH2V-18LR	500	13	12	18	M26x1,5	12	82	48	35	38,5	18	45	09	30	6,5	6
VH2V-22LR	400	20	19	22	M30x2	14	101	60	50	48,5	23	58	12	41	6,5	6
VH2V-28LR	350	25	24	28	M36x2	14	108	65	57	50,5	27,5	65	12	46	8,5	7

SR – heavy



Type	PN(bar)	DN	LW	RA	d1	i	L	L1	B	L2	h1	h2	SW1	SW2	D	h3
VH2V-10SR	500	06	06	10	M18x1,5	12	73	40	26	31,5	13,5	35	09	22	4,5	4,8
VH2V-14SR	500	10	10	14	M22x1,5	14	80	42	32	31,5	16	40	09	27	5,3	5,8
VH2V-16SR	500	13	12	16	M24x1,5	14	86	48	35	38,5	18	45	09	30	6,5	6
VH2V-20SR	500	13	12	20	M30x2	16	90	48	35	38,5	18	45	09	30	6,5	6
VH2V-25SR	400	20	20	25	M36x2	18	109	60	50	48,5	23	58	12	41	6,5	6
VH2V-30SR	350	25	25	30	M42x2	20	120	65	57	50,5	27,5	65	12	46	8,5	7

VH3V

Three-way high pressure ball valve



Specification:

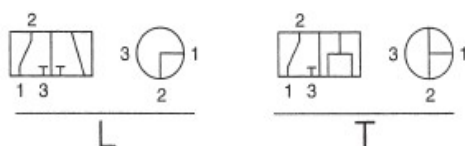
Hydraulic two-way ball valves are used mainly for distribution of hydraulic liquids as a closing valve. The ball valve is made of steel or stainless steel, the ball material is nickel-plated steel or stainless steel. They are produced in two designs – opened „T“ or closed „L“. while using „L“ type, middle position means „all closed“, range of handle turn is 90°. while using „T“ type, middle position means „all connected“, range of handle turn is 180°. Mounting onto a flange or by screws.

Model code:

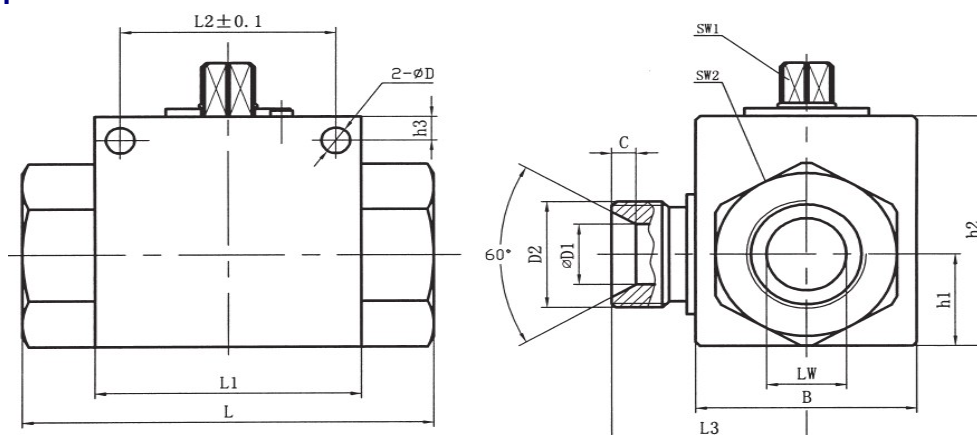
VH3V -- M27x1,5 -- 1 1 1 2 01 X -- *

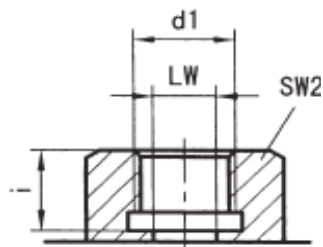
1. Series code: VH3V
2. joint code: Gxx (G thread), xxLR (light), xxSR (heavy)
3. valve body material: 1-steel, 2-stainless steel
4. ball body material: 1-steel, 2-brass, 3-stainless steel
5. operating temperature: -25~+100°C, -30~+170°C
6. other airproof: 2-NBR, 4-FPM
7. handle type: 01-aluminium straight handle, 02-aluminium crooked handle, 03-zinc casting straight handle, 04-zinc casting crooked handle, 05-steel straight handle, 06-steel crooked handle, 09-without handle
8. design number: to be decided by the manufacturer
9. surface disposal: phosphoric polish, electroplated zinc

Symbol:

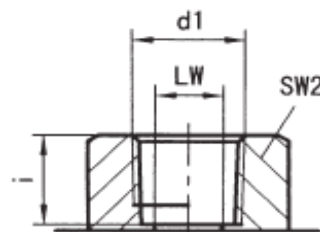


Drawing:

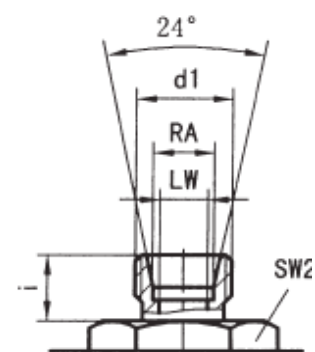


 Dimensions:
G/BSP


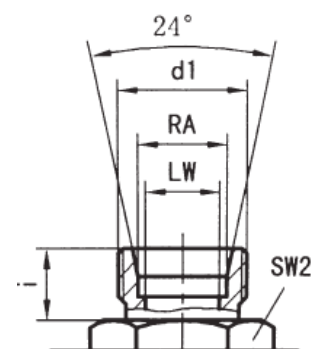
Type	PN (bar)	DN	LW	RA	d1	i	L	L1	B	L2	h1	h2	SW1	SW2	D	h3	L3	D1	C
VH3V-G1/4	500	06	06	/	G1/4	14	69	40	26	31,5	13,5	35	09	22	4,5	4,8	26	6	4
VH3V-G3/8	500	10	10	/	G3/8	14	72	42	32	31,5	16	40	09	27	5,3	5,8	31	8	4
VH3V-G1/2	500	13	12	/	G1/2	16	83	48	35	38,5	18	45	09	30	6,5	6	35	12	3
VH3V-G3/4	400	20	20	/	G3/4	18	93	60	50	48,5	23	58	12	41	6,5	6	44	15	5,5
VH3V-G1	350	25	25	/	G1	21	115	65	57	50,5	27,5	65	12	46	8,5	7	53,5	22	5

NPT


Type	PN (bar)	DN	LW	RA	D1 (D2)	i	L	L1	B	L2	h1	h2	SW1	SW2	D	h3	L3	D1	C
VH3V-NPT1/4	500	06	06	/	NPT1/4	14	69	40	26	31,5	13,5	35	09	22	4,5	4,8	26	6	4
VH3V-NPT3/8	500	10	10	/	NPT3/8	14	72	42	32	31,5	16	40	09	27	5,3	5,8	31	8	4
VH3V-NPT1/2	500	13	12	/	NPT1/2	16	83	48	35	38,5	18	45	09	30	6,5	6	35	12	3
VH3V-NPT3/4	400	20	20	/	NPT3/4	18	95	60	50	48,5	23	58	12	41	6,5	6	44	15	5,5
VH3V-NPT1	350	25	25	/	NPT1	21	113	65	57	50,5	27,5	65	12	46	8,5	7	53,5	22	5

LR – light


Type	PN (bar)	DN	LW	RA	d1	i	L	L1	B	L2	h1	h2	SW1	SW2	D	h3	L3	D1	C
VH3V-08LR	500	06	06	08	M14x1,5	10	67	40	26	31,5	13,5	35	09	22	4,5	4,8	26	6	4
VH3V-12LR	500	10	10	12	M18x1,5	11	74	42	32	31,5	16	40	09	27	5,3	5,8	31	8	4
VH3V-15LR	500	13	12	15	M22x1,5	12	82	48	35	38,5	18	45	09	30	6,5	6	35	12	3
VH3V-18LR	500	13	12	18	M26x1,5	12	82	48	35	38,5	18	45	09	30	6,5	6	35	12	3
VH3V-22LR	400	20	19	22	M30x2	14	101	60	50	48,5	23	58	12	41	6,5	6	44	15	5,5
VH3V-28LR	350	25	24	28	M36x2	14	108	65	57	50,5	27,5	65	12	46	8,5	7	53,5	22	5

SR – heavy


Type	PN (bar)	DN	LW	RA	d1	i	L	L1	B	L2	h1	h2	SW1	SW2	D	h3	L3	D1	C
VH3V-10SR	500	06	06	10	M18x1,5	12	73	40	26	31,5	13,5	35	09	22	4,5	4,8	26	6	4
VH3V-14SR	500	10	10	14	M22x1,5	14	80	42	32	31,5	16	40	09	27	5,3	5,8	31	8	4
VH3V-16SR	500	13	12	16	M24x1,5	14	86	48	35	38,5	18	45	09	30	6,5	6	35	12	3
VH3V-20SR	500	13	12	20	M30x2	16	90	48	35	38,5	18	45	09	30	6,5	6	35	12	3
VH3V-25SR	400	20	20	25	M36x2	18	109	60	50	48,5	23	58	12	41	6,5	6	44	15	5,5
VH3V-30R	350	25	25	30	M42x2	20	120	65	57	50,5	27,5	65	12	46	8,5	7	53,5	22	5

BKH

Ball valve with SAE joint

Specification:

Two-way ball valves with SAE J518C joint are mainly used for distribution of hydraulic liquids as a closing fitting. Ball valve material is steel, ball material is nickel-plated steel.

Model code:

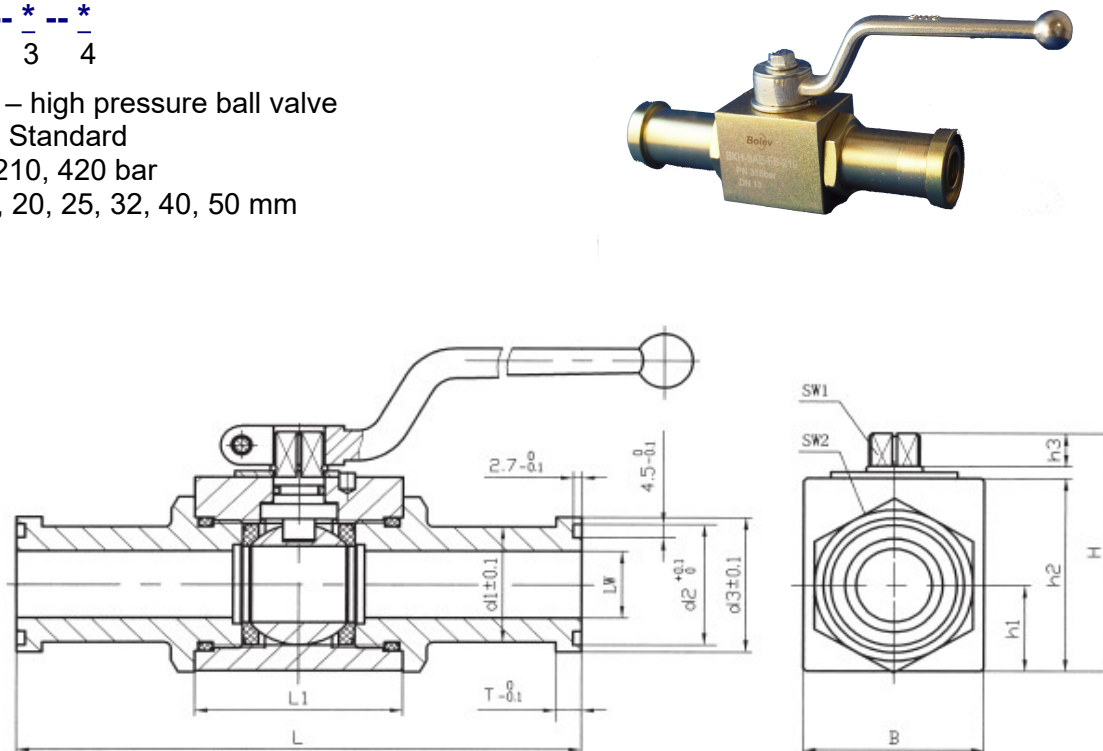
BKH -- SAEFS -- * -- *
 1 2 3 4

1. series code BKH – high pressure ball valve
2. joint: SAE J518C Standard
3. pressure grade: 210, 420 bar
4. nominal path: 13, 20, 25, 32, 40, 50 mm

Symbol:



Drawing:



Dimensions:

Type	PN	DN	LW	L	L1	B	H	h1	h2	h3	SW1	SW2	T	d1	d2	d3	O-ring
BKH-SAE-FS-210-13	210	13	13	151	47	35	49	18	38	10	09	30	6,8	24	25,5	30,2	18,6x3,5
BKH-SAE-FS-420-13	420	13	13	151	47	35	49	18	38	10	09	30	7,9	24	25,5	31,8	18,6x3,5
BKH-SAE-FS-210-20	210	20	19	162	60	48	70	25	55	11	12	41	6,8	31,7	31,9	38,1	25,3,5
BKH-SAE-FS-420-20	315	20	19	174	60	48	70	25	55	11	12	41	8,9	32	31,9	41,3	25x3,5
BKH-SAE-FS-210-25	210	25	25	178	65	57	79	28,5	64	11	12	50	8,1	38	39,8	44,4	32,9x3,5
BKH-SAE-FS-420-25	315	25	22	198	65	57	79	28,5	64	11	12	50	9,6	38	39,8	47,6	32,9x3,5
BKH-SAE-FS-210-32	210	32	30	191	84	75	101	37,5	84	12	14	60	8,1	43	44,6	50,8	37,7x3,5
BKH-SAE-FS-420-32	350	32	27	223	84	75	101	37,5	84	12	14	60	10,4	44	44,6	54	37,7x3,5
BKH-SAE-FS-210-40	210	40	36	231	91	85	112	42,5	95	12	14	70	8,1	50	54,1	60,3	47,2x3,5
BKH-SAE-FS-420-40	350	40	32	281	91	85	112	42,5	95	12	14	70	12,7	51	54,1	63,5	47,2x3,5
BKH-SAE-FS-210-50	210	50	48	232	100	104	131	62	112,5	12	14	90	9,6	62	63,6	71,4	56,7x3,5
BKH-SAE-FS-420-50	350	50	45	316	100	104	131	62	112,5	12	14	90	12,7	67	63,6	79,4	56,7x3,5

KHBF(KHMF) Flange ball valve

Specification:

Flange ball valves are used mainly for distribution of hydraulic liquids as a closing fitting. The ball valve is made of steel, the ball is made of nickel-plated steel, flange connection.

Model code:

KHBF(KHMF) -- 016 -- PN040 -- 1 1 1 2 -- 02 X

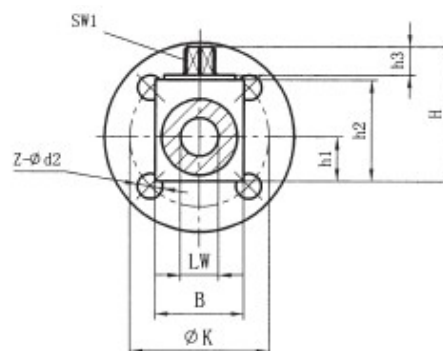
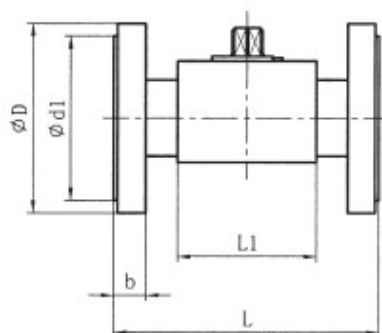
1. series code KHBF(KHMF) – flange ball valve type
2. nominal path: 16, 20, 25, 32, 40, 50 mm
3. working medium: 40, 63, 100, 160, 250, 315 bar
4. valve body material: 1-steel
5. ball body material: 1-steel
6. operating temperature 1. -25~+100 °C, 2. -30~+170 °C
7. other airproof: 2-NBR
8. handle type: 02-aluminium crooked handle, 06-steel crooked handle, 09-without handle
9. construction design: to be decided by the manufacturer

Symbol:

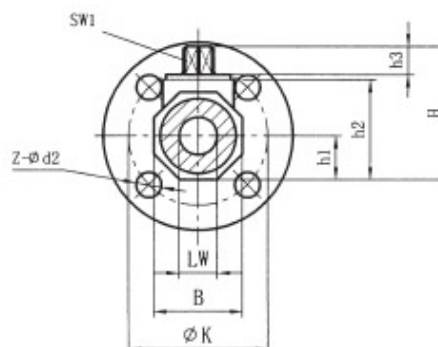
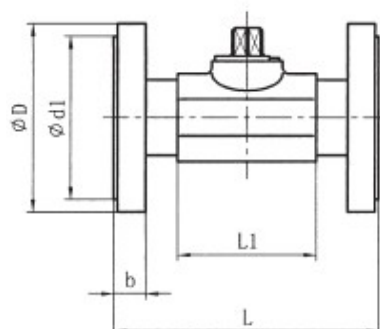


Drawing:

KHBF



KHMF



Dimensions:

Type	Range	DN	LW	L	L1	D	d1	d2	K	B	b	H	h1	h2	h3	SW1	Z
KHBF-016	10-40	16	15	130	48	95	45	14	65	38	16	62	19	45	11	9	4
KHBF-016	63-160					105		14	75		20						
KHBF-016	250-315					130		18	90		26						
KHBF-020	10-40	20	20	150	60	105	58	14	75	48	18	75	25	57	11	12	4
KHBF-025	10-40	25	25	160	65	115	68	14	85	57	18	82	28,5	64	11	12	4
KHBF-025	63-160					140		18	100		24						
KHBF-025	250					150		22	105		28						
KHBF-025	315					160		22	115		34						

Type	Range	DN	LW	L	L1	D	d1	d2	K	B	b	H	h1	h2	h3	SW1	Z
KHMF-032	10-40	32	30	180	84	140	78	18	100	75	18	103	37,5	84	12	14	4
KHMF-032	63-160					155		22	110		26						
KHMF-040	10-40	40	38	200	91	150	88	18	110	85	18	114	42,5	95	12	14	4
KHMF-040	63-160					170		22	125		28						
KHMF-040	250					185		26	135		34						
KHMF-040	315					195		26	145		38						
KHMF-050	10-40	50	48	230	100	165	102	18	125	105	20	131,5	52,5	112,5	12	14	4
KHMF-050	63					180		22	135		26						
KHMF-050	100-160					195		26	145		30						
KHMF-050	250					200		26	150		38						8
KHMF-050	315					210		26	160		42						

Type	range	DN	LW	L	L1	D	d1	d2	K	B	b	H	h1	h2	h3	SW1	Z
KHMF-032	10-40	32	30	130	84	140	78	18	100	75	18	103	37,5	84	12	17	4
KHMF-040		40	38	140	91	150	88		110	85	18	114	42,5	95			
KHMF-050		50	48	150	100	165	102		125	105	20	131,5	52,5	112,5			

KHP(PKH)

Two-way ball valve for manifold mounting

Specification:

Two-way ball valve for manifold mounting. Ball valve material is steel, ball material is nickel-plated steel.

Model code:

KHP(PKH) -- 10 -- 1 1 1 2 -- 01 X

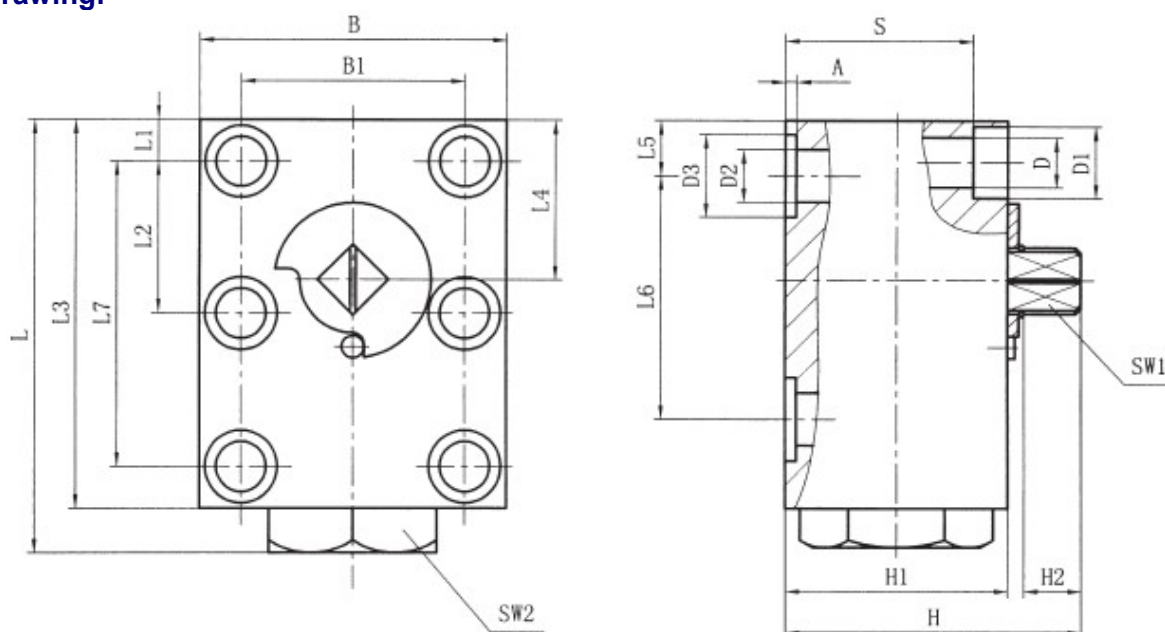
1 2 3 4 5 6 7 8

1. series code KHP(PKH) – two-way ball valve for manifold mounting
2. nominal path: 6, 10, 16, 20, 25, 32, 40, 50 mm
3. valve body material: 1-steel
4. ball body material: 1-steel, 2-brass
5. operating temperature 1. -25~+100 °C, 2. -30~+170 °C
6. otehr airproof: 2-NBR, 4-FPM
7. handle type: 02-aluminium crooked handle, 04-zinc casting crooked handle, 06-steel crooked handle, 09-without handle
8. Design number: to be decided by the manufacturer

Symbol:



Drawing:



Dimensions:

Type	PN	DN	LW	L	L1	L2	L3	L4	L5	L6	L7	B	B1
KHP-06	315	06	06	64	8,5	17,5	59	25	8,5	35	35	40	27
KHP-10	315	10	9,5	77	7,5	27,5	70	29	10	44	55	55	40
KHP-16	315	16	16	110	8,5	41,5	100	43	17	58	83	60	45
KHP-20	315	20	20	126	10	48,5	117	54	20	69	97	70	51
KHP-25	315	25	23,5	145	10	57,5	135	64,5	24	81	115	80	60
KHP-32	315	32	30	177	12	68	165	75,5	29	96	136	100	78
KHP-40	315	40	38	200	30	56	185	80	30	112	112	130	95
KHP-50	315	50	48	245	38	68	220	106	38	136	136	149	112

Type	SW1	SW2	H	H1	H2	D	D1	D2	D3	A	S	O-ring
KHP-06	09	22	37,5	30	7	6,6	11	6	11,7	1,6	23	8x2
KHP-10	09	30	58	40	8,5	9	13	9,5	15	2	31	10x2,6
KHP-16	09	41	72,5	52	11	9	13	16	25	2	43	20,29x2,62
KHP-20	12	41	88,5	60	11	10,5	16,5	20	30	2,5	50	23,39x3,53
KHP-25	12	46	97,5	65	11	10,5	17	23,5	35	2,5	55	28,17x3,53
KHP-32	14	55	118,5	80	12	13	19	30	40	2,5	67	32,92x3,53
KHP-40	14	65	118,5	93	12	17	25	38	48	3	77	42x3,5
KHP-50	14	/	129	110	12	22	33	48	55,4	2,9	88,5	49x3,5

Type	Inner hexagon screw thread	Torque Nm (rub coefficient $\mu=0,14$)
KHP-06	M6-10,9	13
KHP-10	M8-10,9	30
KHP-16	M8-12,9	35
KHP-20	M10-12,9	60
KHP-25	M10-12,9	60
KHP-32	M12-12,9	110
KHP-40	M16-12,9	300
KHP-50	M20-12,9	600

BEH-SAE, KHSAE210

Flange ball valve – SAE

Specification:

Flange ball valve with SAE joint are used for distribution of hydraulic liquids as a closing fitting. Ball valve material is steel, ball material is nickel-plated steel. Mounting is done onto SAE flange or by screws.

Model code:

BEH -- ** -- SAE

1 2 3

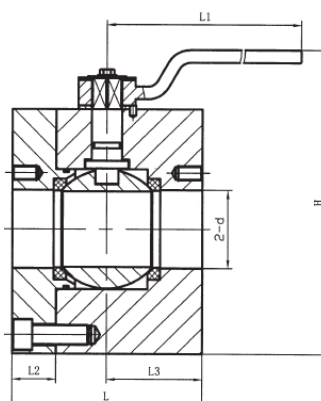
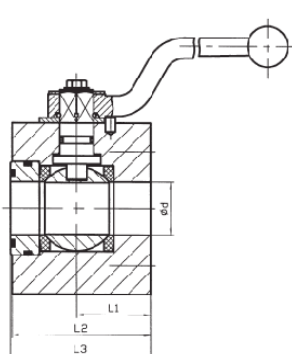
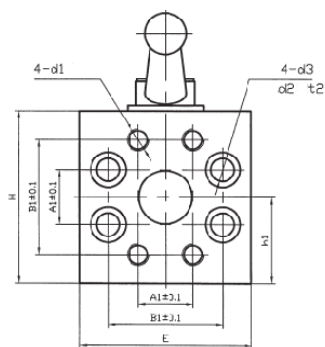
1. series code: BEH – highpressure ball valve
2. nominal pathální velikost: 32/40/50 mm
3. joint: SAE flange

Symbol:

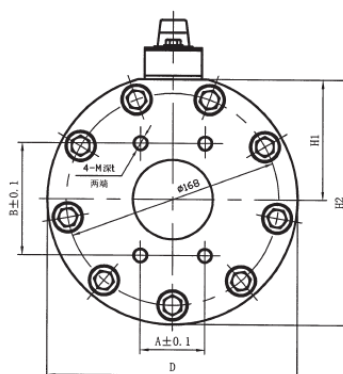


Drawing:

BEH-SAE



KHSAE210



Dimensions:

Type	PN	d	A1	B1	H	h1	E	L1	L2	L3	d1	t1	d2	t2	d3
BEH-32-SAE	400	31	31,8	66,6	100	50	100	43,5	82	83	1/2"-13 UNC-2A	25	20,3	14	13,5
BEH-40-SAE	400	38	36,5	79,3	120	60	120	53,5	99	100	5/8"-11 UNC-2B	36	25,5	17	16,7
BEH-50-SAE	400	48	44,5	96,8	124	62	134	61	110	111	3/4"-10 UNC-2B	36	30,1	21	19,8

Type	PN	d	L1	L2	L3	L	H	H1	H2	A	B	D	M	t
KHSAE210-65	210	62	315	35	75	150	241	95	194	50,8	88,9	198	12	19
KHSAE210-80	210	74	315	40	80	160	252	100	205	61,9	106,4	210	16	2



DKHB

Mining ball valve

Specification:

Mining ball valves are mainly used for hydraulic liquid distribution as a closing element. Ball valve material is steel, ball material is nickel-plated steel mining connection.

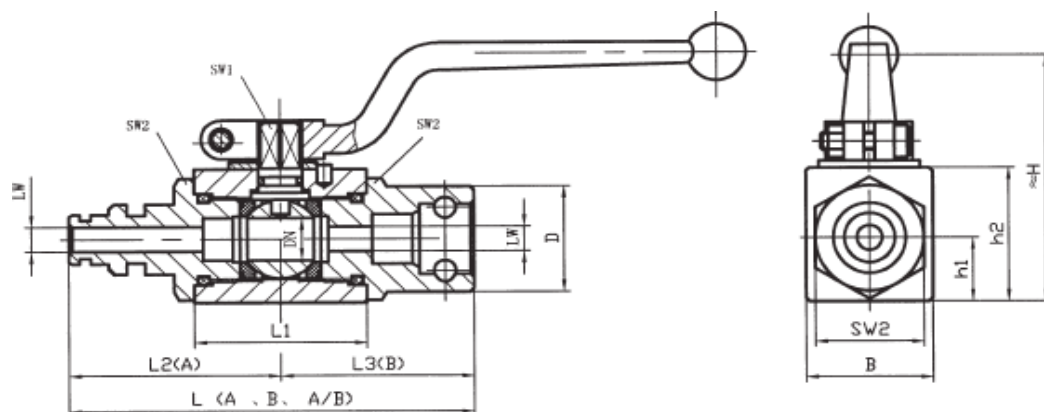
Model code: $\frac{**}{1} - \frac{**}{2}$

1. Left connection specification - A, B
2. Right connection specification -A, B

Symbol:



Drawing:



Dimensions:

Type	PN	DN	LW	L	L1	L2	L3	B	H	h1	h2	SW1	SW2	D
6A	500	06	04	109	40	54,5	—	26	45	13,5	33	09	24	24
10A	500	13	07	116	47	58	—	35	49	18	38	09	30	30
12A	500	16	10	116	48	58	—	38	61	19	45	09	35	35
20A	315	20	16	131	60	65,5	—	48	70	25	55	12	41	41
25A	315	25	20	151	65	75,5	—	57	79	28,5	64	12	53	53
32A	315	32	25	178	84	89	—	75	101	37,5	84	14	60	60
6A-6B	500	06	04	104	40	54,5	49,5	26	45	13,5	33	09	24	24
10A-10B	500	13	07	111	47	58	53	35	49	18	38	09	30	30
12A-12B	500	16	10	112	48	58	54	38	61	19	45	09	35	35
20A-20B	315	20	16	125	60	65,5	59,5	48	70	25	55	12	41	41
25A-25B	315	25	20	144	65	75,5	68,5	57	79	28,5	64	12	53	53
32A-32B	315	32	25	167	84	89	78	75	101	37,5	84	14	60	60
6B	500	06	04	99	40	—	49,5	26	45	13,5	33	09	24	24
10B	500	13	07	106	47	—	53	35	49	18	38	09	30	30
12B	500	16	10	108	48	—	54	38	61	19	45	09	35	35
20B	315	20	16	119	60	—	59,5	48	70	25	55	12	41	41
25B	315	25	20	137	65	—	68,5	57	79	28,5	64	12	53	53
32B	315	32	25	156	84	—	78	75	101	37,5	84	14	60	60

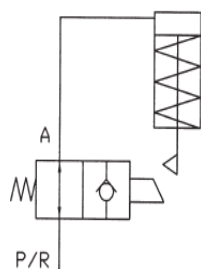
KP-XC13

Spring ball valve

Specification:

Spring ball valves are mainly used for hydraulic liquid distribution as a closing element. Opened as long as the handle is held, after releasing the handle the system will be automatically closed.

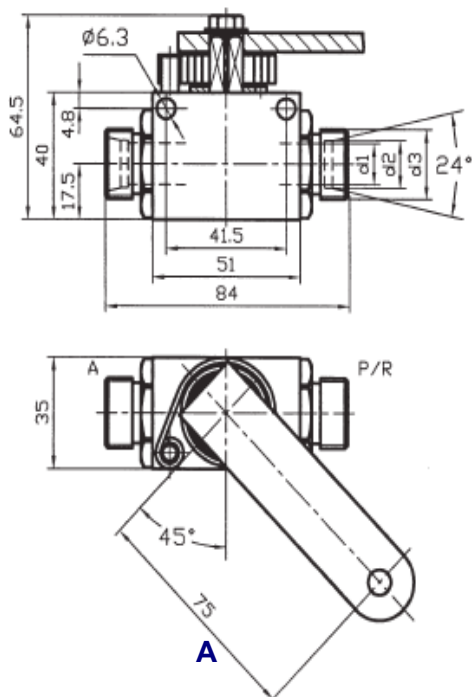
Symbol:



Drawing:

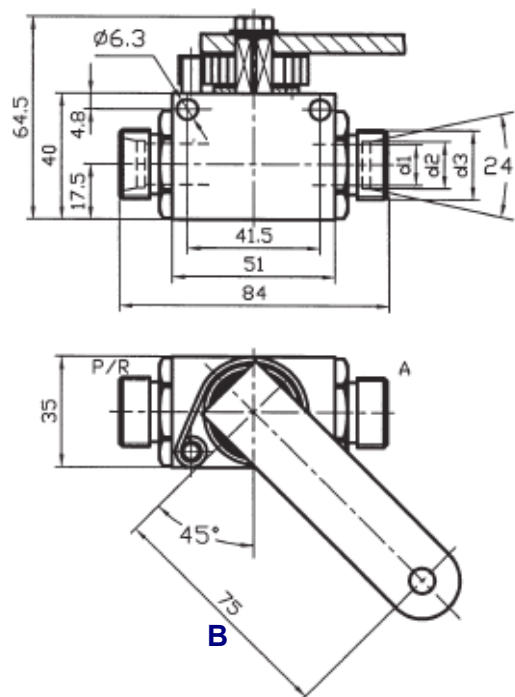
KP-XC13-12LR-A

KP-XC13-15LR-A



KP-XC13-12LR-B

KP-XC13-15LR-B



Dimensions:

Type	PN	d1	D2	d3
KP-XC13-12LR-*	400	10	12	M18x1,5
KP-XC13-15LR-*	400	13	15	M22x1,5

KHB

Ball valve with pneumatic accutors

Specification:

Hydraulic two-way ball valves are mainly used for hydraulic liquid distribution as a closing element. Ball valve material is steel, ball material is nickel-plated steel. Handle is operated by a pneumatic drive.

Technical parameters:

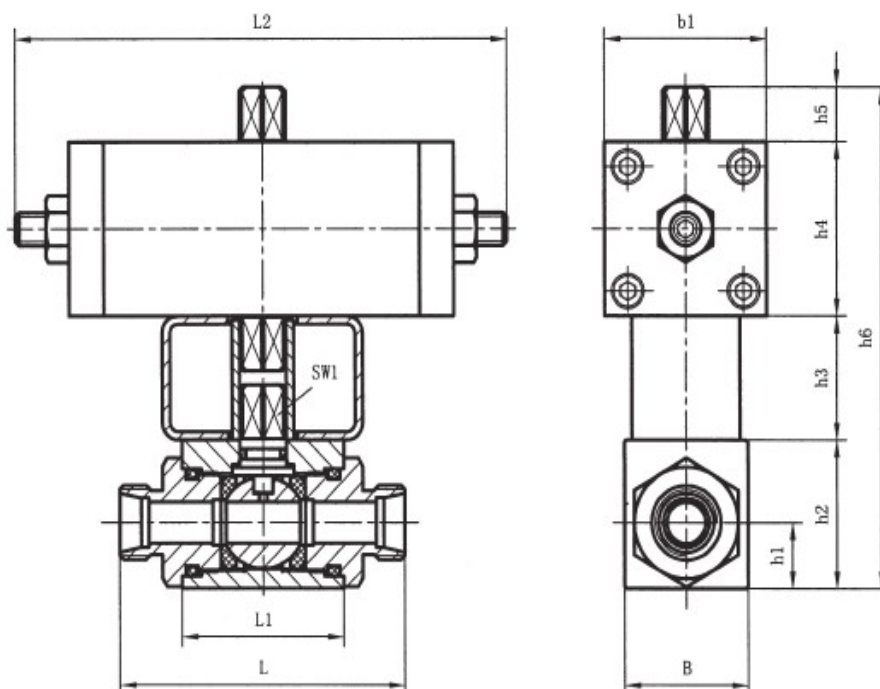
Control medium: compressed air

Control pressure: 0,6~0,8 MPa

Ball valve dimensions: identical with KHB models



Drawing:



Dimensions:

Type	DN	PN	L	L1	L2	B	b1	h1	h2	h3	h4	h5	h6	SW1
Q04-KHB-*	04	500	Dimensions identical with ball valves KHB	40	174	26	60	13,5	33	40	60	20	153	09
Q06-KHB-*	06	500		40	174	26	60	13,5	33	40	60	20	153	09
Q08-KHB-*	08	500		42	198	32	70	16	36	60	70	20	186	09
Q10-KHB-*	10	500		42	198	32	70	16	36	60	70	20	186	09
Q13-KHB-*	13	500		47	198	35	70	18	38	60	70	20	188	09
Q16-KHB-*	16	400		48	237	38	84	19	45	60	84	20	209	09
Q20-KHB-*	20	315		60	237	48	84	25	55	60	84	20	219	12
Q25-KHB-*	25	315		65	237	57	84	28,5	64	60	84	20	228	12
Q32-KHB-*	32	315		84	290	75	108	37,5	84	60	108	30	282	14
Q40-KHB-*	40	315		91	290	85	108	42,5	95	60	108	30	293	14
Q50-KHB-*	50	315		100	290	104	108	52	112,5	60	108	30	310,5	14

V-serie

One-way valve

Specification:

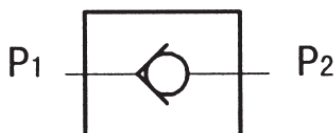
One-way valves enable flow only in one direction.

Model code:

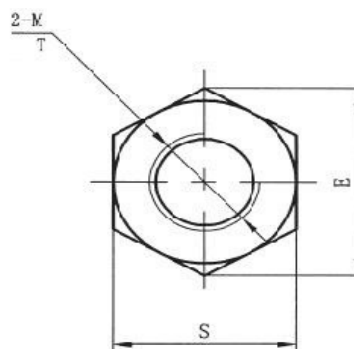
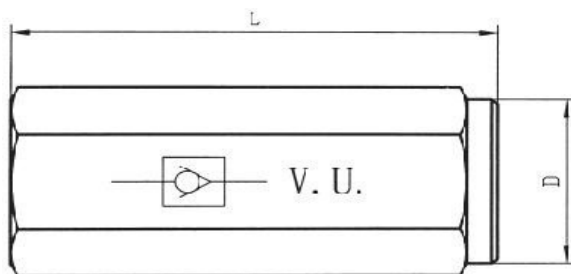
VU -- * -- * / * -- *
 1 2 3 4 5

1. type: V-series – straight one-way check valve
2. nominal path: 08, 10, 12, 16, 20, 25, 30, 40 mm
3. surface: 01=zinc-plated, 02=phosphoric polish, 03= hard chromium plated, 04=bluing
4. connection thread: 1=metric, 2=BSP
5. burst pressure: 0,05 MPa

Symbol:



Drawing:



Dimensions:

Dia meter	Type	Max. flow (l/min)	Burst pressure (bar)	PN (bar)	Dimensions (mm)					
					L	E	S	D	T	M (NPT)
08	VU-08***	30	±0,4/0,7	500	62	21,5	19	19	12	1/4"
10	VU-10***	45	±0,4/0,7	500	68	27,5	24	24	14	3/8"
12	VU-12***	70	±0,4/0,7	500	77	34,5	30	30	15	1/2"
16	VU-16***	110	±0,4/0,7	400	88	41,5	36	36	16	3/4"
20	VU-20***	160	±0,4/0,7	350	105	47	41	41	18	1"
25	VU-25***	210	±0,4/0,7	350	130	63	55	55	20	1 1/4"
30	VU-30***	320	±0,4/0,7	350	138	75	65	65	22	1 1/2"
40	VU-40***	460	±0,4/0,7	250	160	92	80	80	24	2"

BLV-BFD, BLV-DBFD

Counter balance valve BLV-BFD 10/35, BLV-DBFD 10/35

Specification:

Counter balance valve are continuously regulated valves. Loads can be controlled in reduce or limited.

Technical parameters:

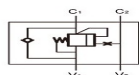
Nominal pressure: 32 MPa

Inner diameter: 9mm(BFD),10mm(DBFD)

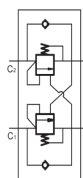
Flow: 120l/min

Control pressure: 2-4,5 MPa

Symbol:



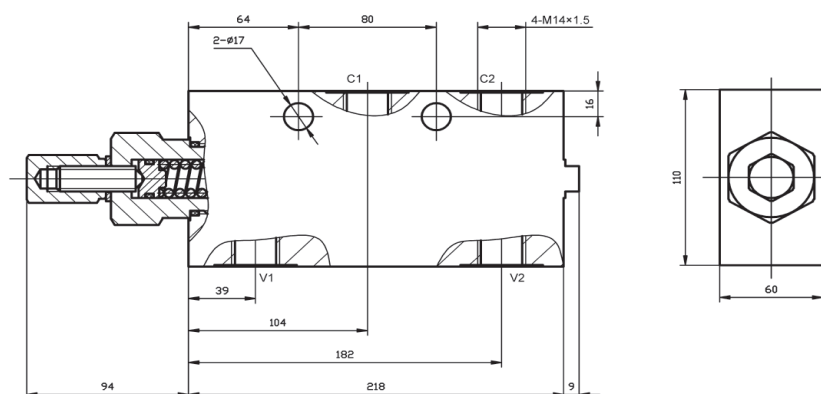
BFD



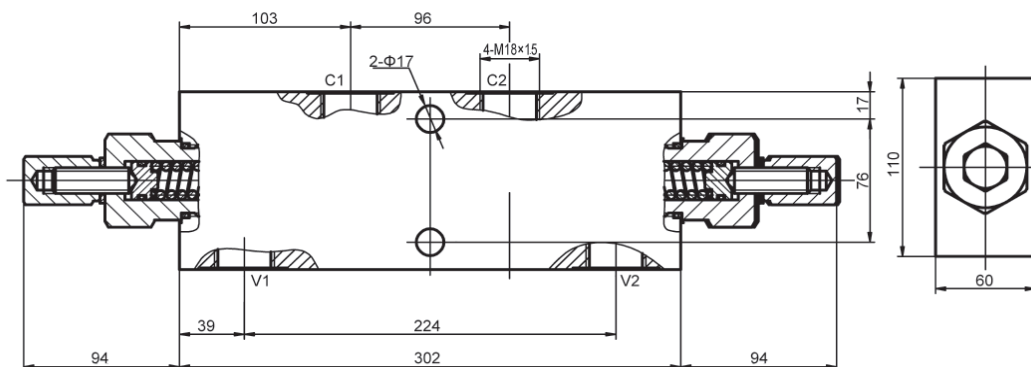
DBFD

Drawing:

BFD



DBFD

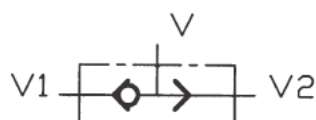


VU/SF Shuttle valve

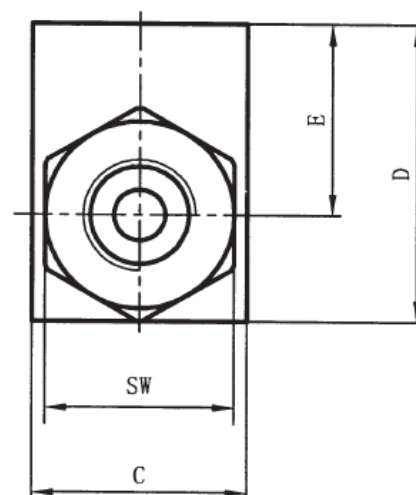
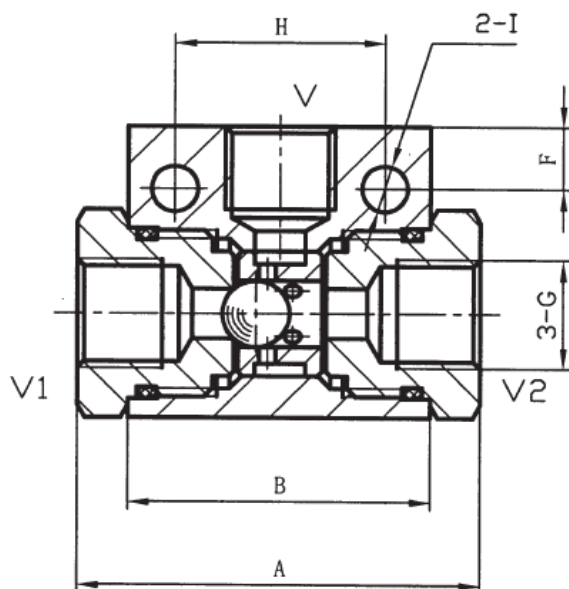
Specification:

Shuttle valve chooses the higher pressure from two pressure branches of a manifold.

Symbol:



Drawing:



Dimensions:

Type	A	B	C	D	E	F	G		H	I	SW
VU/SF-01-1/4	48	36	25	35	22,5	7,5	G1/4	NPT1/4	25	5,5	22
VU/SF-02-3/8	59	45	30	45	30	8	G3/8	NPT3/8	29	6,5	27
VU/SF-03-1/2	90	57	35	50	32,5	8,5	G1/2	NPT1/2	36	6,5	32
VU/SF-04-3/4	113	62	45	60	37	6,5	G3/4	NPT3/4	50	8,5	41
VU/SF-05-1	120	80	50	80	54,5	11	G1	NPT1	60	10,5	46

Technical parameters:

Type	VU/SF-01-1/4	VU/SF-02-3/8	VU/SF-03-1/2	VU/SF-04-3/4	VU/SF-05-1
Max. pressure (MPa)	50	50	50	35	30
Max. flow (l/min)	20	45	80	110	150

STU

Throttle check valve

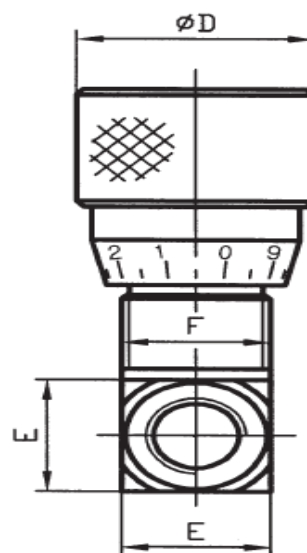
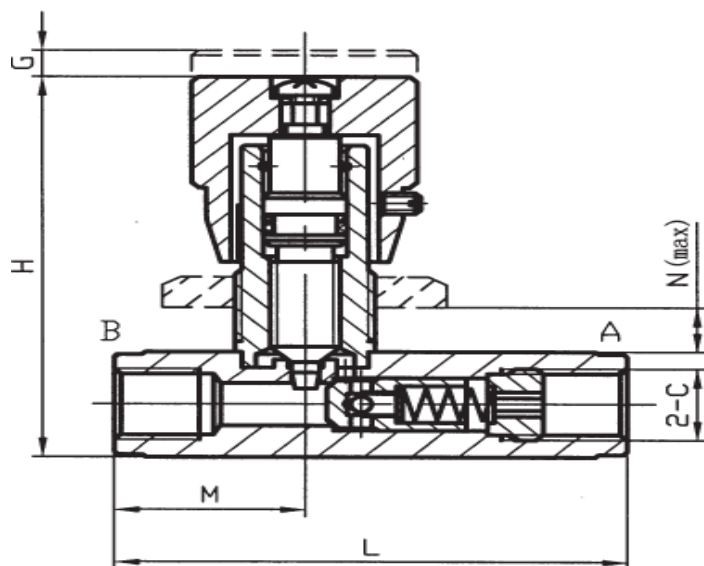
Specification:

Throttle check valves are used for flow regulation. Throttling size is dependent on flow, temperature and rate of flow.

Symbol:



Drawing:



Dimensions:

Type	C	L	H	D	E	F*	G	M	N
STU0400	G1/4 NPT1/4	73	72	32	20	M20x1	5	27	7S
STU0600	G3/8 NPT3/8	82	80	32	25	M25x1,5	9	31	7
STU0800	G1/2 NPT1/2	98	92	45	30	M30x1,5	9	36,5	9
STU1200	G3/4 NPT3/4	112	100	45	40	M35x1,5	10	42	11
STU1600	G1 NPT1	142	122	45	45	M40x1,5	12	51	15

Technical parameters:

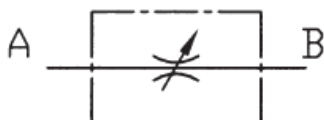
Type	STU0400	STU0600	STU0800	STU1200	STU1600
Max. pressure (MPa)	40	40	40	40	32
Max. flow (l/min)	12	30	50	85	150

STB Throttle valve

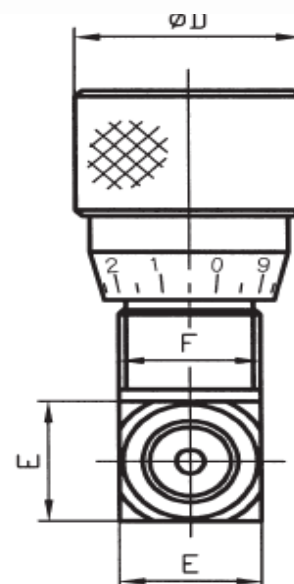
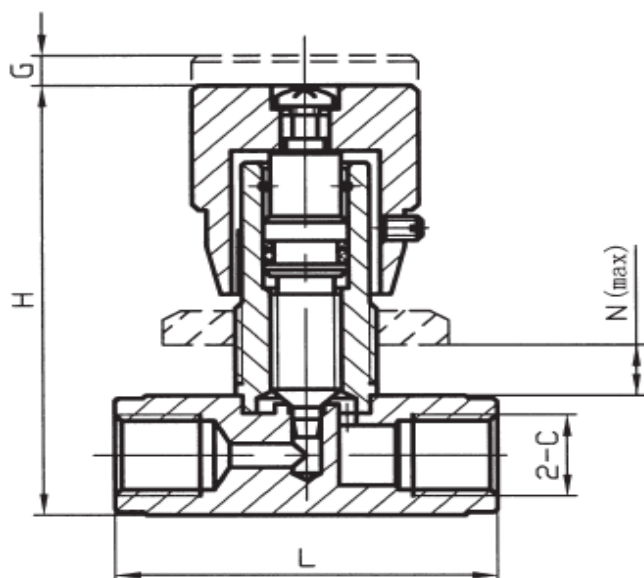
Specification:

Throttle check valves are used for flow regulation. Throttling size is dependent on flow, temperature and rate of flow.

Symbol:



Drawing:



Dimensions:

Type	C		L	H	D	E	F*	G	N
STB0400	G1/4	NPT1/4	54	72	32	20	M20x1	5	7
STB0600	G3/8	NPT3/8	62	80	32	25	M25x1,5	9	7
STB0800	G1/2	NPT1/2	73	92	45	30	M30x1,5	9	9
STB1200	G3/4	NPT3/4	84	100	45	40	M35x1,5	10	11
STB1600	G1	NPT1/2	102	122	45	45	M40x1,5	12	15

Technical parameters:

Type	STB0400	STB0600	STB0800	STB1200	STB1600
Max. pressure (MPa)	40	40	40	40	32
Max. flow (l/min)	12	30	50	85	150