

DESCRIPTION OF OPERATION

3-way ball valve type BK... is applied to open and close working fluid flow in hydraulic systems.

It is adopted for mounting by screwed pipe fittings to PN-ISO 8434-1 (DIN 2352)

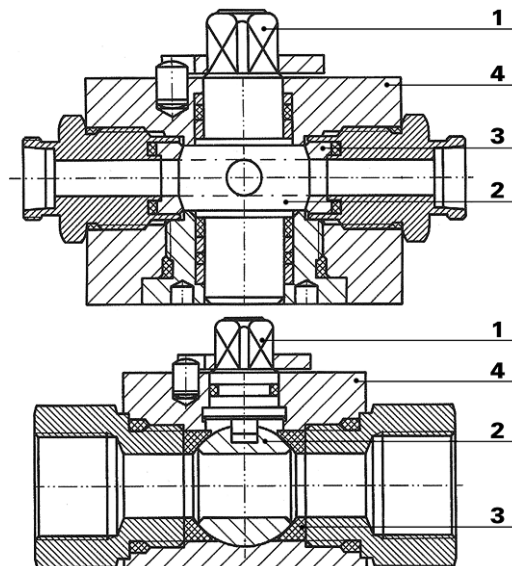
Switching position is set by means of a lever coupled with the spindle 2 turning the ball 1. Polyamide seats 3 provide the seal of the ball. In case of need, the lever can be assembled by multiple of angle 40°.



Caution:

Leak tightness in the seat cut-off can be obtained when pressure in it is zero or pressure on the way of the connected seats exceeds.

The valve install in hydraulic system to take hold on hexagon of thread. It isn't to allow for turn up the valve by hold on the housing (pos. 4).

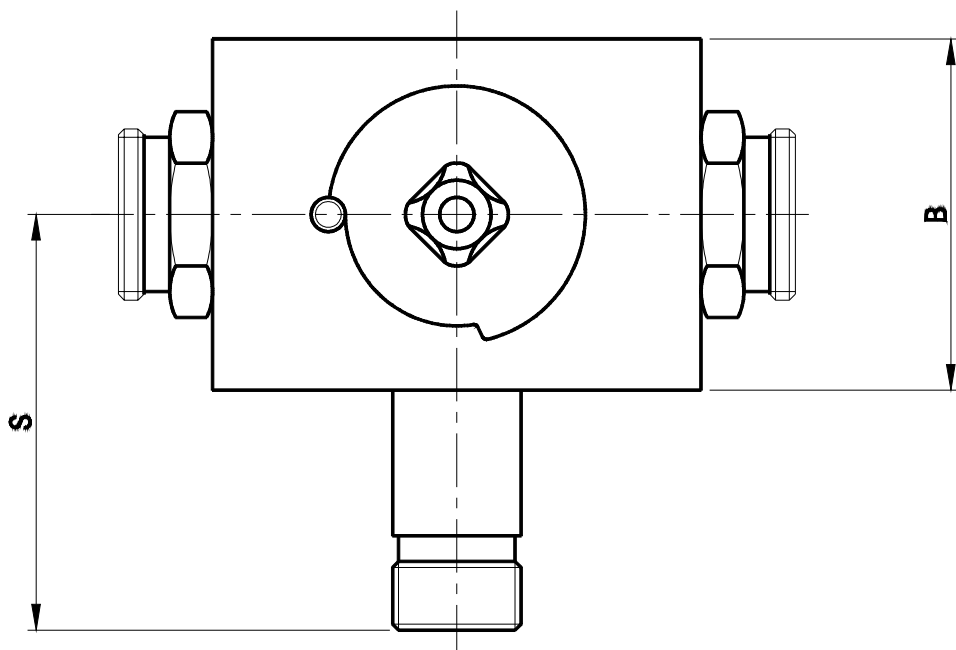
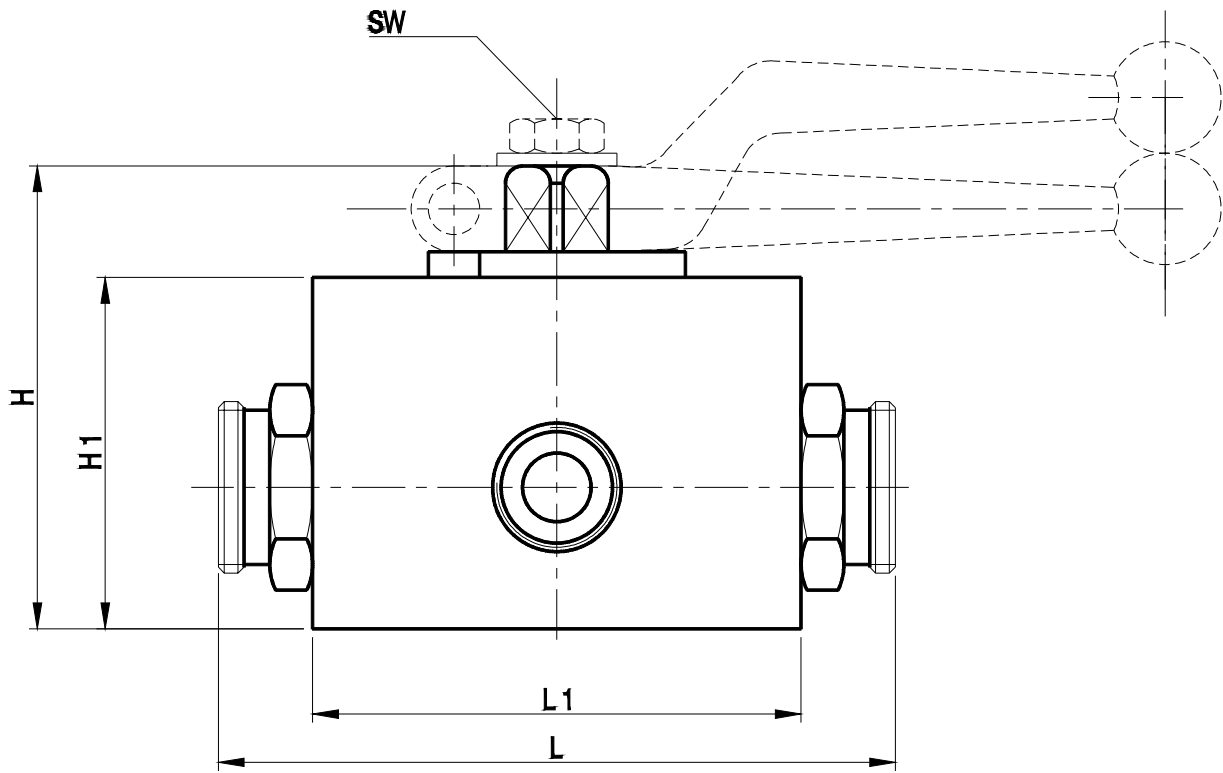


TECHNICAL DATA

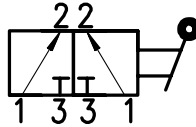
Nominal size	4, 6, 8, 10, 13, 16, 20, 25, 32, 40
Nominal pressure	60 MPa
Working medium	Mineral oil
Fluid viscosity range	2,8 do 380 mm ² / s
Operating temperature range	253 ÷ 373 K
Filtration (recommended)	< 30 μm
Materials:	
- body (4)	steel (blacked)
- ball (2)	steel (chromium plated)
- spindle (1)	steel (zinc wated)
- seat (3)	polyamid
- seal of spindle	perbunan

OVERALL DIMENSIONS

3-way ball valve type BKH(R) .. LK (small)



GRAPHICAL SYMBOL



3-way ball valve with male thread light type **3BKHL LK** (small)

Designation	Nominal passage DN	Real passage DR	P nom. MPa	Exterior pipe diameter	Thread	L	B	S	H	H1	SW
3 BKHL 04 LK	4	5	40	6	M12 x 1,5	67	26	32	43,5	32	9
3 BKHL 06 LK	6	6	40	8	M14 x 1,5	67	26	32	43,5	32	9
3 BKHL 08 LK	8	7	40	10	M16 x 1,5	71	26	32	43,5	32	9
3 BKHL 10 LK	10	9	40	12	M18 x 1,5	75	32	40	49	38	9
3 BKHL 13 LK	12	11,5	35	15	M22 x 1,5	84	35	42	51	40	9
3 BKHL 16 LK	16	14	35	18	M26 x 1,5	83	38	43	62	46	12
3 BKHL 20 LK	20	18	35	22	M30 x 2	102	49	47	73	57	14
3 BKHL 25 LK	25	18	35	28	M36 x 2	108	60	55	76	60	14

3-way ball valve with male thread, heavy type **3BKHS LK** (small)

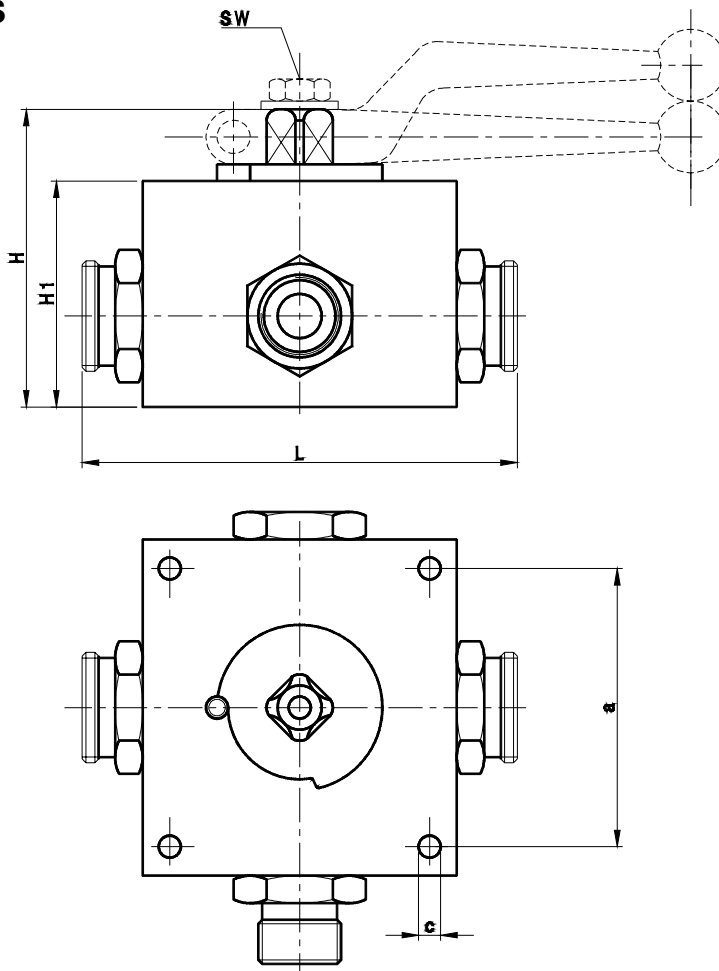
Designation	Nominal passage DN	Real passage DR	P nom. MPa	Exterior pipe diameter	Thread	L	B	S	H	H1	SW
3 BKHS 04 LK	4	5	40	8	M16 x 1,5	73	26	32	43,5	32	9
3 BKHS 06 LK	6	6	40	10	M18 x 1,5	73	26	32	43,5	32	9
3 BKHS 08 LK	8	7	40	12	M20 x 1,5	76	26	32	43,5	32	9
3 BKHS 10 LK	10	9	40	14	M22 x 1,5	84	32	40	49	38	9
3 BKHS 13 LK	12	11,5	35	16	M24 x 1,5	87	35	42	51	40	9
3 BKHS 16 LK	16	15	35	20	M30 x 1,5	91	38	43	62	46	12
3 BKHS 20 LK	20	18	35	25	M36 x 2	110	49	47	73	57	14
3 BKHS 25 LK	25	22	35	30	M42 x 2	120	60	55	76	60	14

3-way ball valve with female screw thread, type - **3BKR LK** (small)

Designation	Nominal passage DN	Real passage DR	P nom. MPa	Thread	L	B	S	H	H1	SW
3 BKR 04 LK	4	5	40	G 1/8"	69	26	32	43,5	32	9
3 BKR 06 LK	6	6	40	G 1/4"	69	26	32	43,5	32	9
3 BKR 10 LK	10	9	40	G 3/8"	73	32	36	49	38	9
3 BKR 13 LK	13	11,5	35	G 1/2"	85	35	37	51	40	9
3 BKR 20 LK	20	18	35	G 3/4"	95	49	47	73	57	14
3 BKR 25 LK	25	22	35	G 1"	113	60	55	76	60	14

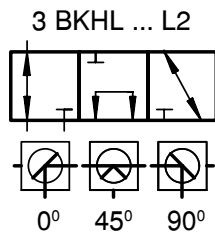
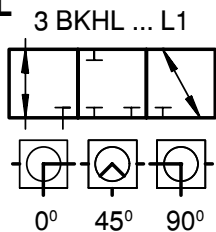
OVERALL DIMENSIONS

3-way ball valve type BKH(R)



3-way ball valve with female screw thread, type - 3BKR... L ...

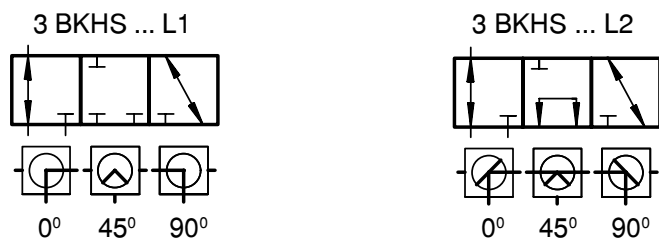
GRAPHICAL SYMBOL



Designation	Nominal passage DN	Real passage DR	P nom. MPa	Exterior pipe diameter	Thread	L	a	c	H	H1	SW
3 BKHL 04 L...	4	5	60	6	M12 x 1,5	105	55	6,5	68	52	12
3 BKHL 06 L...	6	6	60	8	M14 x 1,5	105	55	6,5	68	52	12
3 BKHL 08 L...	8	9	50	10	M16 x 1,5	114	65	6,5	71	55	14
3 BKHL 10 L...	10	9	50	12	M18 x 1,5	114	65	6,5	71	55	14
3 BKHL 13 L...	13	12,5	40	15	M22 x 1,5	136	80	8,5	77	60	14
3 BKHL 16 L...	16	12,5	40	18	M26 x 1,5	136	80	8,5	77	60	14
3 BKHL 20 L...	20	19	40	22	M30 x 2	152	85	8,5	89,5	70,5	17
3 BKHL 25 L...	25	24	35	28	M36 x 2	170	105	11	98	78	19
3 BKHL 32 L...	32	24	35	35	M45 x 2	174	115	11	112	86	19
3 BKHL 40 L...	40	36	6,4	42	M52 x 2	246	150	14,5	129	107	22

3-way ball valve with male screw thread, heavy type - 3BKHS... L ...

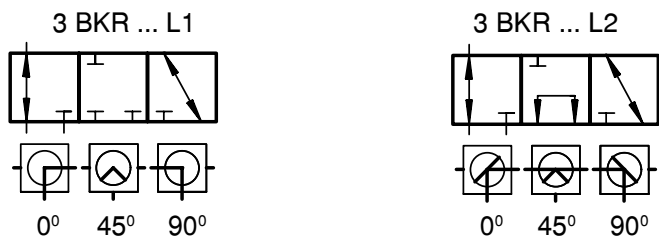
GRAPHICAL SYMBOL



Designation	Nominal passage DN	Real passage DR	P nom. MPa	Exterior pipe diameter	Thread	L	a	c	H	H1	SW
3 BKHS 04 L...	4	5	60	8	M16 x 1,5	105	55	6,5	68	52	12
3 BKHS 06 L...	6	6	60	10	M18 x 1,5	105	55	6,5	68	52	12
3 BKHS 08 L...	8	9	50	12	M20 x 1,5	116	65	6,5	71	55	14
3 BKHS 10 L...	10	9	50	14	M22 x 1,5	121	65	6,5	71	55	14
3 BKHS 13 L...	13	12,5	40	16	M24 x 1,5	140	80	8,5	77	60	14
3 BKHS 16 L...	16	12,5	40	20	M30 x 2	144	80	8,5	77	60	14
3 BKHS 20 L...	20	19	40	25	M36 x 2	162	85	8,5	89,5	70,5	17
3 BKHS 25 L...	25	24	35	30	M42 x 2	180	105	11	98	78	19
3 BKHS 32 L...	32	24	35	38	M52 x 2	184	115	11	112	86	19

3-way ball valve with female screw thread, heavy type - 3BKR... L ...

GRAPHICAL SYMBOL

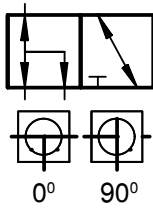


Designation	Nominal passage DN	Real passage DR	P nom. MPa	Thread	L	a	c	H	H1	SW
3 BKR 04 L...	4	5	60	G 1/8"	100	55	6,5	68	52	12
3 BKR 06 L...	6	6	60	G 1/4"	100	55	6,5	68	52	12
3 BKR 10 L...	10	9	50	G 3/8"	115	65	6,5	71	55	14
3 BKR 13 L...	13	12,5	40	G 1/2"	135	80	8,5	77	60	14
3 BKR 20 L...	20	19	40	G 3/4"	148	85	8,5	89,5	70,5	17
3 BKR 25 L...	25	24	35	G 1"	172	105	11	98	78	19
3 BKR 32 L...	32	24	35	G1 1/4"	188	115	11	112	86	19
3 BKR 40 L...	40	36	6,3	G1 1/2"	230	150	14,5	129	107	22

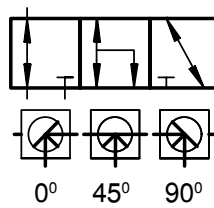
3-way ball valve with male screw thread, **light type** - 3BKHL... L ...

GRAPHICAL SYMBOL

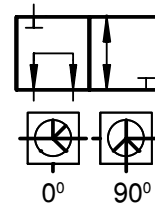
3 BKHL ... T1



3 BKHL ... T2



3 BKHL ... T3

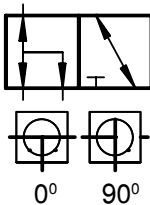


Designation	Nominal passage DN	Real passage DR	P nom. MPa	Exterior pipe diameter	Thread	L	a	c	H	H1	SW
3 BKHL 04 T...	4	5	60	6	M12 x 1,5	105	55	6,5	68	52	12
3 BKHL 06 T...	6	6	60	8	M14 x 1,5	105	55	6,5	68	52	12
3 BKHL 08 T...	8	9	50	10	M16 x 1,5	114	65	6,5	71	55	14
3 BKHL 10 T...	10	9	50	12	M18 x 1,5	114	65	6,5	71	55	14
3 BKHL 13 T...	13	12,5	40	15	M22 x 1,5	136	80	8,5	77	60	14
3 BKHL 16 T...	16	12,5	40	18	M26 x 1,5	136	80	8,5	77	60	14
3 BKHL 20 T...	20	19	40	22	M30 x 2	152	85	8,5	89,5	70,5	17
3 BKHL 25 T...	25	24	35	28	M36 x 2	170	105	11	98	78	19
3 BKHL 32 T...	32	24	35	35	M45 x 2	174	115	11	112	86	19
3 BKHL 40 T...	40	36	6,4	42	M52 x 2	246	150	14,5	129	107	22

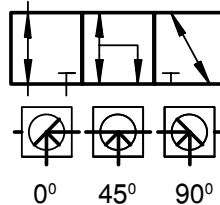
3-way ball valve with male screw thread, **heavy type** - 3BKHS... T ...

GRAPHICAL SYMBOL

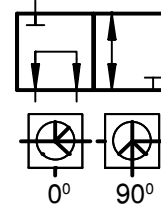
3 BKHS ... T1



3 BKHS ... T2



3 BKHS ... T3

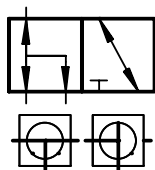


Designation	Nominal passage DN	Real passage DR	P nom. MPa	Exterior pipe diameter	Thread	L	a	c	H	H1	SW
3 BKHS 04 T...	4	5	60	8	M16 x 1,5	105	55	6,5	68	52	12
3 BKHS 06 T...	6	6	60	10	M18 x 1,5	105	55	6,5	68	52	12
3 BKHS 08 T...	8	9	50	12	M20 x 1,5	116	65	6,5	71	55	14
3 BKHS 10 T...	10	9	50	14	M22 x 1,5	121	65	6,5	71	55	14
3 BKHS 13 T...	13	12,5	40	16	M24 x 1,5	140	80	8,5	77	60	14
3 BKHS 16 T...	16	12,5	40	20	M30 x 2	144	80	8,5	77	60	14
3 BKHS 20 T...	20	19	40	25	M36 x 2	162	85	8,5	89,5	70,5	17
3 BKHS 25 T...	25	24	35	30	M42 x 2	180	105	11	98	78	19
3 BKHS 32 T...	32	24	35	38	M52 x 2	184	115	11	112	86	19

3-way ball valve with female screw thread, **heavy type** - 3BKR... T ...

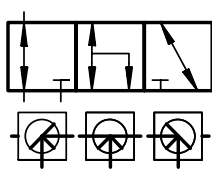
GRAPHICAL SYMBOL

3 BKR ... T1



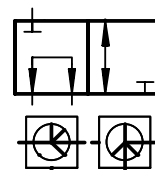
0° 90°

3 BKR ... T2



0° 45° 90°

3 BKR ... T3



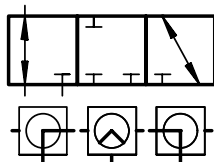
0° 90°

Designation	Nominal passage DN	Real passage DR	P nom. MPa	Thread	L	a	c	H	H1	SW
3 BKR 04 T...	4	5	60	G 1/8"	100	55	6,5	68	52	12
3 BKR 06 T...	6	6	60	G 1/4"	100	55	6,5	68	52	12
3 BKR 10 T...	10	9	50	G 3/8"	115	65	6,5	71	55	14
3 BKR 13 T...	13	12,5	40	G 1/2"	135	80	8,5	77	60	14
3 BKR 20 T...	20	19	40	G 3/4"	148	85	8,5	89,5	70,5	17
3 BKR 25 T...	25	24	35	G 1"	172	105	11	98	78	19
3 BKR 32 T...	32	24	35	G1 1/4"	188	115	11	112	86	19
3 BKR 40 T...	40	36	6,3	G1 1/2"	230	150	14,5	129	107	22

3-way ball valve with female metrical screw thread, **heavy type** - 3BKM... T ...

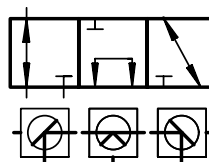
GRAPHICAL SYMBOL

3 BKM ... L1



0° 45° 90°

3 BKM ... L2



0° 45° 90°

Designation	Nominal passage DN	Real passage DR	P nom. MPa	Thread	L	a	c	H	H1	SW
3 BKM 13 L...	13	13	40	M22 x 1,5	136	80	8,5	77	55	14

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