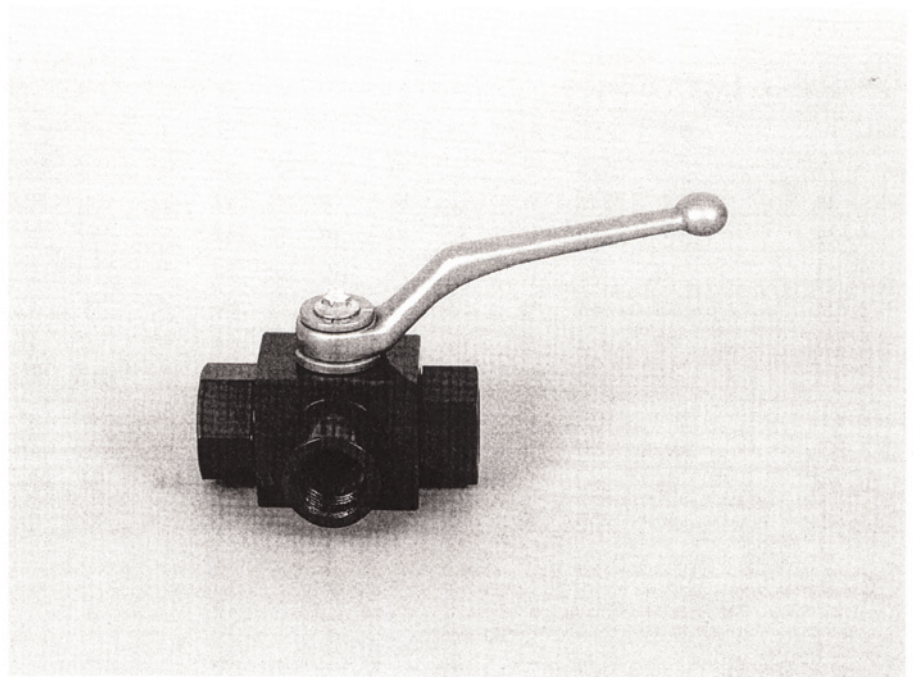


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## High-Pressure 3-Way Selector Ball Valves

BK3 Steel  
PN 420 bar

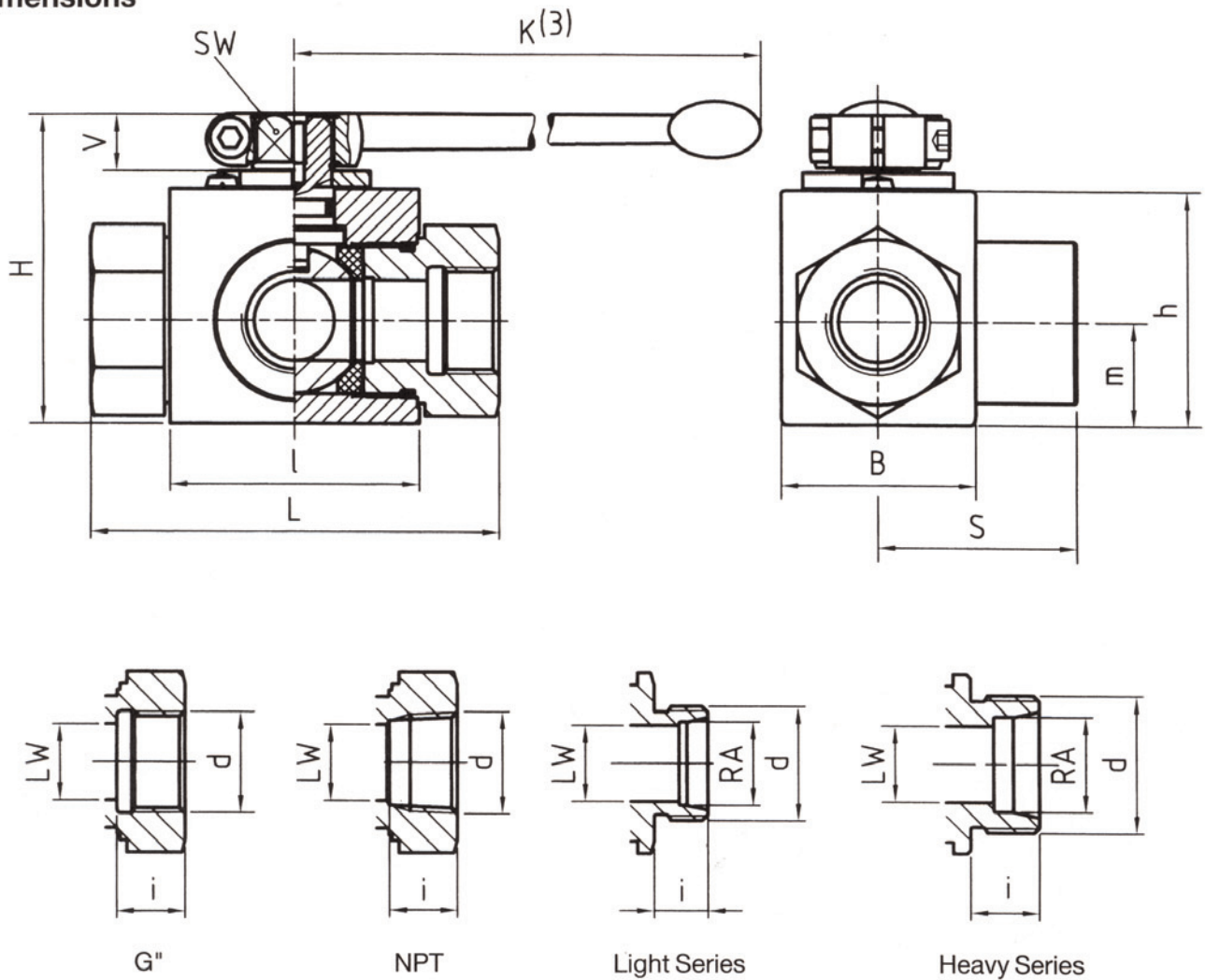
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MHA-high-pressure ball valves type BK3 are 3-way selector ball valves. They are suitable for high-pressures up to 420 bar.

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## Dimensions



### DIN 2353 · Light Series

Please note the pressure rating of the tube connection !

Type	DN <sup>(1)</sup>	PN <sup>(2)</sup>	RA	LW	L	I	B	H	h	m	S	V	SW	K <sup>(3)</sup>	i	d	Weight <sub>kg</sub>
BK3 - 6L	4	315	6	5	67	40	26	47	33	13,5	33,5	11	9	115	10	M 12 x 1,5	0,3
BK3 - 8L	6	315	8	6	67	40	26	47	33	13,5	33,5	11	9	115	10	M 14 x 1,5	0,4
BK3 - 10L	8	315	10	8	74	40	26	47	33	13,5	37	11	9	115	11	M 16 x 1,5	0,4
BK3 - 12L	10	315	12	10	74	43	32	52	38	17,5	37	11	9	115	11	M 18 x 1,5	0,5
BK3 - 15L	13	315	15	13	82	48	35	54	40	19	41	11	9	115	12	M 22 x 1,5	0,65
BK3 - 18L	13	315	18	13	82	48	35	54	40	19	41	11	9	115	12	M 26 x 1,5	0,69
BK3 - 22L	20	315	22	20	101	62	49	75	57	24,5	50,5	14	14	200	14	M 30 x 2	1,5
BK3 - 28L	25	315	28	25	108	66	58	83	65	29,5	54	14	14	200	14	M 36 x 2	2,1
BK3 - 35L	25/32	315	35	25	112	66	58	83	65	29,5	56	14	14	200	16	M 45 x 2	2,5
BK3 - 35L	32	350	35	30	136	81	78	106	84,5	39	68	16,5	17	320	16	M 45 x 2	-
BK3 - 42L	40	350	42	38	162	104	106	127	106	53	81	16,5	17	320	16	M 52 x 2	-

<sup>(1)</sup> DN in mm

<sup>(2)</sup> PN in bar (1 bar=14.503 psi) depending on the seal material

<sup>(3)</sup> The ball valve will be delivered without the handle being mounted.

Standard handles:

SW 9 - Zn bent

SW 14 - Zn straight

SW 17 - St bent

Other designs and materials on request.

## DIN 2353 · Heavy Series Please note the pressure rating of the tube connection !

Type	DN <sup>(1)</sup>	PN <sup>(2)</sup>	RA	LW	L	I	B	H	h	m	S	V	SW	K <sup>(3)</sup>	i	d	Weight <sub>kg</sub>
BK3 - 8S	4	315	8	5	73	40	26	47	33	13,5	36,5	11	9	115	12	M 16 x 1,5	0,42
BK3 -10S	6	315	10	6	73	40	26	47	33	13,5	36,5	11	9	115	12	M 18 x 1,5	0,43
BK3 -12S	8	315	12	8	76	40	26	47	33	13,5	38	11	9	115	12	M 20 x 1,5	0,44
BK3 -14S	10	315	14	10	80	43	32	52	38	17,5	40	11	9	115	14	M 22 x 1,5	0,5
BK3 -16S	13	315	16	13	86	48	35	54	40	19	43	11	9	115	14	M 24 x 1,5	0,65
BK3 -20S	13	315	20	13	90	48	35	54	40	19	45	11	9	115	16	M 30 x 2	0,7
BK3 -25S	20	315	25	20	109	62	49	75	57	24,5	54,5	14	14	200	18	M 36 x 2	1,7
BK3 -30S	25	315	30	25	120	66	58	83	65	29,5	60	14	14	200	20	M 42 x 2	2,4
BK3 -38S	25/32	315	38	25	124	66	58	83	65	29,5	62	14	14	200	22	M 52 x 2	2,8
BK3 -38S	32	350	38	30	148	81	78	106	84,5	39	74	16,5	17	320	22	M 52 x 3	-

## Female Thread DIN/ISO 228

Type	DN <sup>(1)</sup>	PN <sup>(2)</sup>	LW	L	I	B	H	h	m	S	V	SW	K <sup>(3)</sup>	i	d	Weight <sub>kg</sub>
BK3 -G 1/8	4	315	5	69	40	26	47	33	13,5	34,5	11	9	115	10	G 1/8	-
BK3 -G 1/4	6	315	6	69	40	26	47	33	13,5	34,5	11	9	115	14	G 1/4	0,46
BK3 -G 3/8	10	315	10	72	43	32	52	38	17,5	36	11	9	115	14	G 3/8	0,6
BK3 -G 1/2	13	315	13	83	48	35	54	40	19	41,5	11	9	115	16,3	G 1/2	0,7
BK3 -G 5/8	13	315	13	83	48	35	54	40	19	41,5	11	9	115	16	G 5/8	0,7
BK3 -G 3/4	20	315	20	95	62	49	75	57	24,5	47,5	14	14	200	18	G 3/4	1,8
BK3 -G 1	25	315	25	113	66	58	83	65	29,5	56,5	14	14	200	20	G 1	2,4
BK3 -G 1 1/4	25/32	315	25	120	66	58	83	65	29,5	60	14	14	200	22	G 1 1/4	2,64
BK3 -G 1 1/4	32	350	30	111	81	78	106	84,5	39	55	16,5	17	320	22	G 1 1/4	-
BK3 -G 1 1/2	40	420	38	130	104	106	127	106	53	65	16,5	17	320	24	G 1 1/2	-
BK3 -G 2	50	350	48	150	118	116	137	116	58	75	16,5	17	320	26	G 2	-

## NPT Female Thread ANSI B1.20.1

Type	DN <sup>(1)</sup>	PN <sup>(2)</sup>	LW	L	I	B	H	h	m	S	V	SW	K <sup>(3)</sup>	i	d	Weight <sub>kg</sub>
BK3 -1/4" NPT	6	315	6	69	40	26	47	33	13,5	34,5	11	9	115	17	1/4" NPT	0,46
BK3 -3/8" NPT	10	315	10	78	43	32	52	38	17,5	36	11	9	115	17,4	3/8" NPT	0,6
BK3 -1/2" NPT	13	315	13	104	48	35	54	40	19	41,5	11	9	115	25	1/2" NPT	0,7
BK3 -3/4" NPT	20	315	20	102	62	49	75	57	24,5	47,5	14	14	200	23,1	3/4" NPT	1,8
BK3 - 1" NPT	25	315	25	119	66	58	83	65	29,5	56,5	14	14	200	27,8	1" NPT	2,4
BK3 -1 1/4" NPT	25/32	315	25	130	66	58	83	65	29,5	60	14	14	200	28,3	1 1/4" NPT	2,64
BK3 -1 1/4" NPT	32	350	30	120	81	78	106	84,5	39	60	16,5	17	320	28,3	1 1/4" NPT	-
BK3 -1 1/2" NPT	40	420	38	140	104	106	127	106	53	70	16,5	17	320	28	1 1/2" NPT	-
BK3 -2" NPT	50	420	48	150	118	116	137	116	58	75	16,5	17	320	30,3	2" NPT	-

(1) DN in mm

(2) PN in bar (1bar=14.503 psi) depending on the seal material

(3) The ball valve will be delivered without the handle being mounted.

Standard handles:

SW 9 - Zn bent

SW 14 - Zn straight

SW 17 - St bent

Other designs and materials on request.

## Order Example

BK3 - DN6 - G1/4 - 1 1 2 3 - L . . . . .

3-way selector ball valve

Nominal diameter

Type of adapter

Material of body and adapter

9SMn28K 1  
St52-3 2  
Body St52-3  
Adapter 9SMn28K 8

Material of ball and stem

9SMn28K 1  
Stainless steel 4

Additional text

Form of port

L-port

T-port

(Please note our technical appendix for the use of BK3 with T-port!)

Stem and adapter seal material

Buna-N

Teflon

Viton

EPDM

Ball seal material

POM-MoS<sub>2</sub>

Teflon

L  
T

3  
4  
5  
6

2  
4

Ball valves with teflon-stem-seals have viton-o-rings as standard adapter seals.

Metallic ball seal leak rate according to DIN 3230 part 3 - rate 2 is standard.

Other ball seals on request.

Standard material combination:

- 1123 Zn-plated for DN4 - 13,
- 8123 Zn-plated for DN20 - 25,
- 212A Zn-plated for DN32 - 50.

## General Information

### Admissible working temperature for body material

9SMn28K: - 10°C to +100°C

St52-3: - 60°C to +300°C

Attention: Please note lower pressures at higher temperatures.

### Admissible working temperature for seal material

Buna-N - 35°C to +100°C

Viton - 25°C to +200°C

POM-MoS<sub>2</sub> - 30°C to +100°C

Teflon - 200°C to +220°C

EPDM - 50°C to +130°C

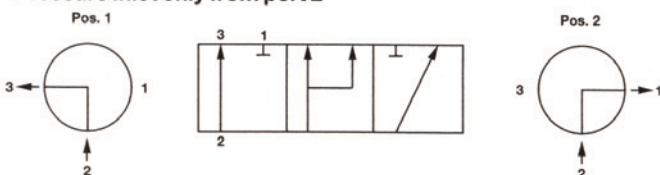
Attention: Please note lower pressures at higher temperatures.

### Storing and Assembling

1. Do not remove the dust caps during storing.
2. Pipes into which ball valves will be mounted have to be rinsed thoroughly before the assembly.
3. All pressure and temperature values in the catalogue are maximum values under normal conditions. Do not hesitate to enquire in special cases. MHA-ball valves with metal seals may also be used as throttling valves.

### Open cross-over (no zero position)

#### Pressure inlet only from port 2



Please ask for type BK3S in case you need pressure inlet from all ports.

## Pressure-temperature diagram for ball seal consisting of teflon

