

ANSI Flange Ball Valves KHBF / KHMF

Model code
(also order example)

KHBF 16 A0150 ... 11141 06 X

Designation

KHBF = block type ball valve DN 16 – 25 (steel)
 KHMF = sleeve type ball valve DN 32 – 50 (steel)
 DN 16 – 50 (stainless steel)

Nominal bore

Pressure range ANSI class

150 220 psi / 15 bar
 300 574 psi / 40 bar
 400 768 psi / 54 bar
 600 1151 psi / 81 bar
 900 1725 psi / 121 bar
 1500 2876 psi / 202 bar
 2500 4792 psi / 337 bar

Sealing surface

no details = smooth sealing strip – raised face RF
 RTJ = sealing strip with O-ring – ring joint face

Material codes

1	1	1	4	1
Steel	Steel	Synthetic material (POM)	Viton (FKM)	Steel
Housing				
Connection adaptors	Ball	Ball seal	Soft seal	Flanges
Control spindle				
3	3	1	4	3
Stainl. steel (AISI316Ti)	Stainl. steel (AISI316Ti)	Synthetic material (POM)	Viton (FKM)	Stainl. steel (AISI316Ti)
Housing				
Connection adaptors	Ball	Ball seal	Soft seal	Flanges
Control spindle				

(other material combinations available on request)

Handle

06 = steel handle, cranked (supplied loose)

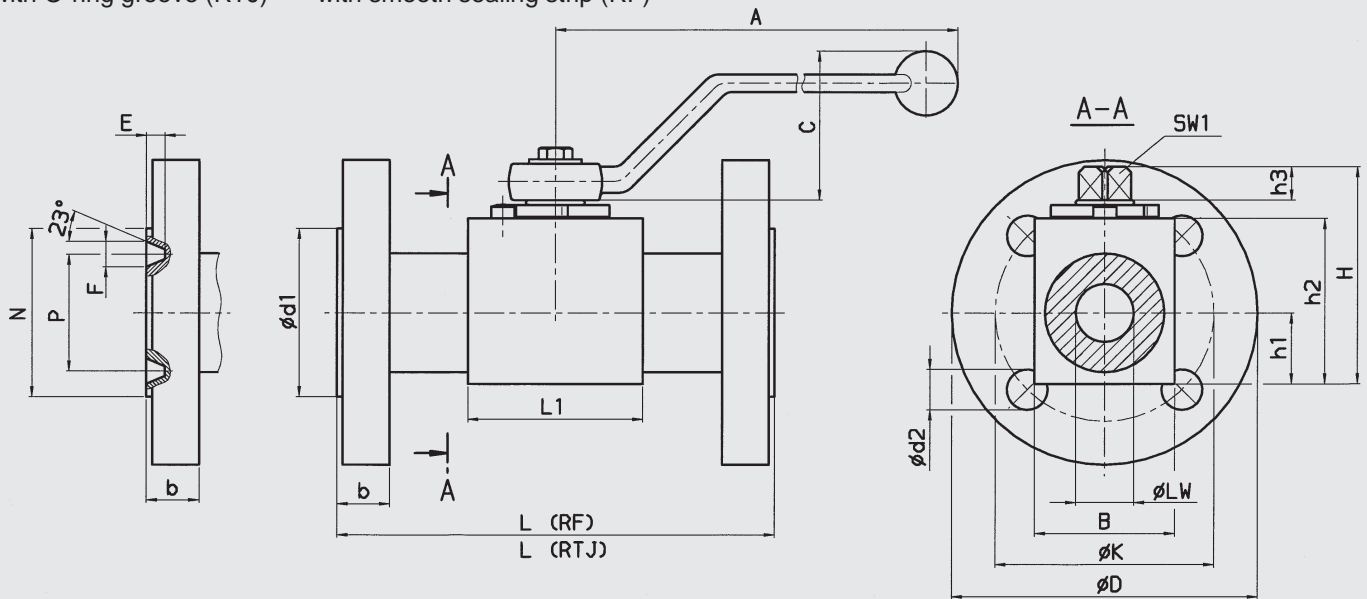
Series

(Determined by manufacturer)

Dimensions

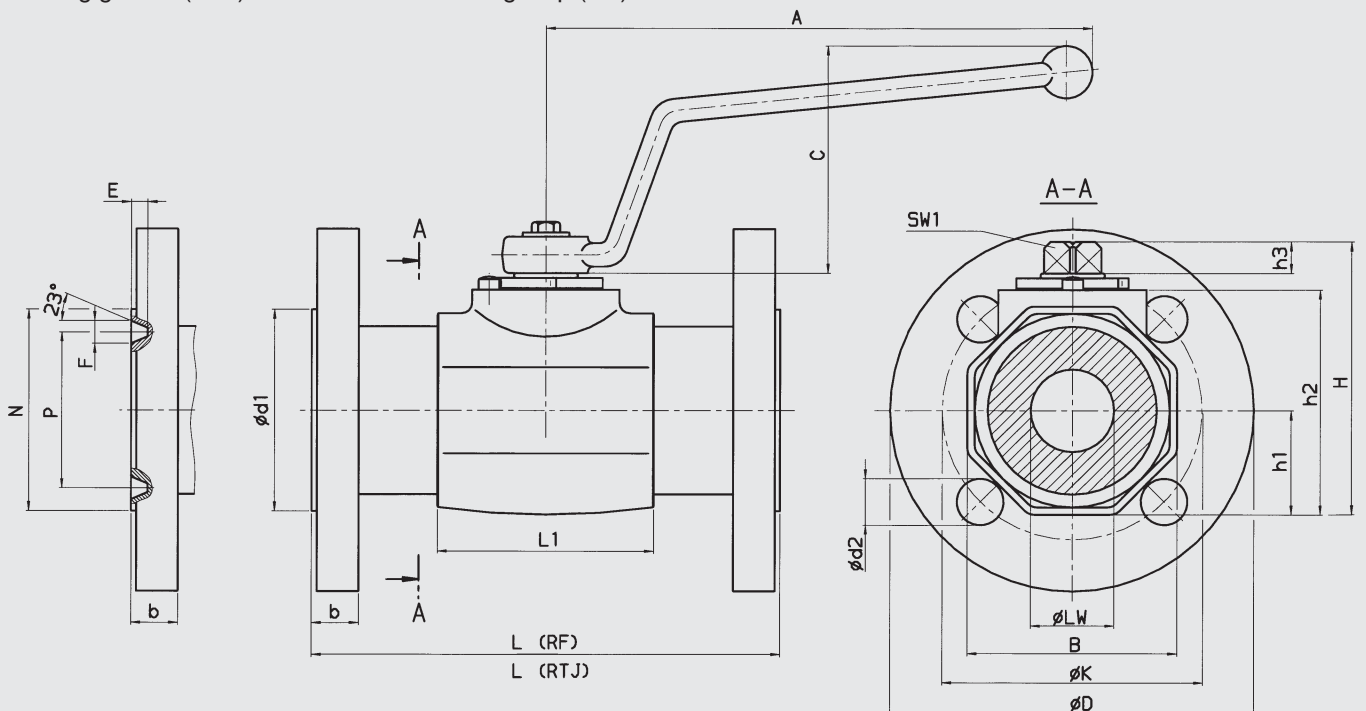
KHBF

with O-ring groove (RTJ) with smooth sealing strip (RF)



KHMF

with O-ring groove (RTJ) with smooth sealing strip (RF)



		Housing dimensions										PN (Ball valve)	
Type of constr.	Type	DN	LW	L1	B	H	h1	h2	h3	SW1	A	C	[bar]
Block housing DN16-25 (Steel)	KHBF-16	1/2"	15	47	38	62	19	45	11	12	169	59	400
	KHBF-20	3/4"	20	60	48	75	24.5	57	11	14	169	59	350
	KHBF-25	1"	25	65	57	81.5	28.5	64	11	14	169	59	350
Sleeve housing DN16-50 (Stainless steel) DN32-50 (Steel)	KHMF-16	1/2"	15	45.8	45	66.5	22.5	48.5	11	12	169	59	400
	KHMF-20	3/4"	20	58.3	55	78	27.5	60	11	14	169	59	350
	KHMF-25	1"	25	63.5	60	83.5	30	65.5	11	14	169	59	350
	KHMF-32	1 1/4"	30	84	75	103	38	85	12	17	228	80	350
	KHMF-40	1 1/2"	38	91	85	114	43	96	12	17	228	80	350
	KHMF-50	2"	48	100	105	131.5	53	113	12	17	228	80	350

Flange dimensions ANSI class 150

DN	L (RF)	L (RTJ)	D	d1	d2	k	b	z*	N	P	F	E	Weight [kg]
16 - 1/2"	108	-	88.9	35.1	15.8	60.5	11.2	4	-	-	-	-	1.8
20 - 3/4"	117.4	-	98.6	42.9	15.8	69.9	12.7	4	-	-	-	-	2.9
25 - 1"	127	139.7	108	50.8	15.8	79.2	14.2	4	63.5	47.6	8.7	6.4	4.0
32 - 1 1/4"	139.7	152.4	117.3	63.5	15.8	88.9	15.7	4	73.2	57.2	8.7	6.4	6.4
40 - 1 1/2"	165.1	177.8	127	73.2	15.8	98.6	17.5	4	82.6	65.1	8.7	6.4	7.5
50 - 2"	177.8	190.5	152.4	91.9	19	120.7	19	4	101.6	82.6	8.7	6.4	11.1

Flange dimensions ANSI class 300

DN	L (RF)	L (RTJ)	D	d1	d2	k	b	z*	N	P	F	E	Weight [kg]
16 - 1/2"	139.7	150.9	95.3	35.1	15.8	66.6	14.2	4	50.8	34.1	7.1	5.6	2.2
20 - 3/4"	152.4	165.1	117.4	42.9	19	82.6	15.7	4	63.5	42.9	8.7	6.4	3.9
25 - 1"	165.1	177.8	124	50.8	19	88.9	17.5	4	69.9	50.8	8.7	6.4	5.0
32 - 1 1/4"	177.8	190.5	133.4	63.5	19	98.6	19	4	79.3	60.3	8.7	6.4	8.3
40 - 1 1/2"	190.5	203.2	155.5	73.2	22.4	114.3	20.6	4	90.4	68.3	8.7	6.4	9.9
50 - 2"	215.9	231.7	165.1	91.9	19	127	22.4	8	108	82.6	11.9	7.9	12.8

Flange dimensions ANSI class 400/600

DN	L (RF)	L (RTJ)	D	d1	d2	k	b	z*	N	P	F	E	Weight [kg]
16 - 1/2"	165.1	163.6	95.3	35.1	15.8	66.6	20.6	4	50.8	34.1	7.1	5.6	2.5
20 - 3/4"	190.5	190.5	117.4	42.9	19	82.6	22.1	4	63.5	42.9	8.7	6.4	4.4
25 - 1"	215.9	215.9	124	50.8	19	88.9	23.9	4	69.9	50.8	8.7	6.4	5.5
32 - 1 1/4"	228.6	228.6	133.4	63.5	19	98.6	26.9	4	79.3	60.3	8.7	6.4	9.2
40 - 1 1/2"	241.3	241.3	155.4	73.2	22.4	114.3	28.7	4	90.4	68.3	8.7	6.4	11.1
50 - 2"	292.1	295.2	165.1	91.9	19	127	31.8	8	108	82.6	11.9	7.9	14.7

Flange dimensions ANSI class 900/1500

DN	L (RF)	L (RTJ)	D	d1	d2	k	b	z*	N	P	F	E	Weight [kg]
16 - 1/2"	215.9	215.9	120.7	35.1	22.4	82.6	28.7	4	60.5	39.7	8.7	6.4	4.9
20 - 3/4"	228.6	228.6	130.1	42.9	22.4	88.9	31.8	4	66.6	44.5	8.7	6.4	6.7
25 - 1"	254	254	149.4	50.8	25.4	101.6	34.8	4	71.4	50.8	8.7	6.4	9.7
32 - 1 1/4"	279.4	279.4	158.8	63.5	25.4	111.3	34.8	4	81	60.3	8.7	6.4	13.5
40 - 1 1/2"	304.8	304.8	177.8	73.2	28.5	124	38.1	4	92	68.3	8.7	6.4	17.4
50 - 2"	368.3	371.4	215.9	91.9	25.4	165.1	44.5	8	124	95.3	11.9	7.9	28.4

Flange dimensions ANSI class 2500

DN	L (RF)	L (RTJ)	D	d1	d2	k	b	z*	N	P	F	E	Weight [kg]
16 - 1/2"	263.7	263.7	133.4	35.1	22.4	88.9	36.6	4	65	42.9	8.7	6.4	9.0
20 - 3/4"	273.1	273.1	139.7	42.9	22.4	95.3	38.1	4	73.2	50.8	8.7	6.4	11.5
25 - 1"	307.9	307.9	158.8	50.8	25.4	108	41.4	4	82.6	60.3	8.7	6.4	14.8
32 - 1 1/4"	349.3	352.3	184.2	63.5	28.5	130.1	44.5	4	101.6	72.2	11.9	7.9	21.9
40 - 1 1/2"	384.1	387.1	203.1	73.2	31.8	146	50.8	4	114.3	82.6	11.9	7.9	29.5
50 - 2"	450.9	453.9	235	91.9	28.5	171.5	57.2	8	133.4	101.6	11.9	7.9	43.0

z* = number of fixing holes

Technical specifications

Length:	ASME / ANSI - B16.10
Flange dimensions:	ASME / ANSI - B16.5
Flange connections:	rotating flanges
Mounting position:	optional
Ambient temperature:	-10 °C to +80 °C
Nominal pressure:	up to PN 337 bar (see pressure range)
Operating fluids:	mineral oil to DIN 51524 Part 1 and Part 2 (other media on request)
Temperature of operating fluid:	-10 °C to +80 °C
Spare parts:	Seal kits available on request
Accessories:	All ball valves can be supplied with the following options: Actuator Limit controls Lock

Note

The information in this brochure relates to the operating conditions and applications described.
For applications or operating conditions not described, please contact the relevant technical department.
Subject to technical modifications.