



Specification

DESIGN

2-piece design full bore
Anti-static and Fireproof structure
Design: ASME B16.34

OPERATION

Handle 90° rotation

CONNECTION

End flange standard: DIN2633 HG/T20592
ASME B16.5 HG/T20615
GB/T 9113

FACE TO FACE LENGTH

DIN3202 F4/F5
GB/T12221 series12

NOMINAL PRESSURE

PN16/PN25/40
150LB/300LB

TEMPERATURE RANGE

PTFE: -30°C - +180°C
S-PTFE: -30°C - +200°C
PEEK: -40°C - +250°C
R-PTFE: -30°C - +200°C
C-PTFE: -20°C - +180°C
TFM4215: -25°C - +220°C

MATERIALS

Body: WCB
CF8
CF8M

Ball: 304
316

Ball seal: PTFE/S-PTFE/PEEK
R-PTFE/C-PTFE/TFM4215

Valve stem seal:PTFE/R-PTFE/Graphite

Handle: SS

OPTIONS

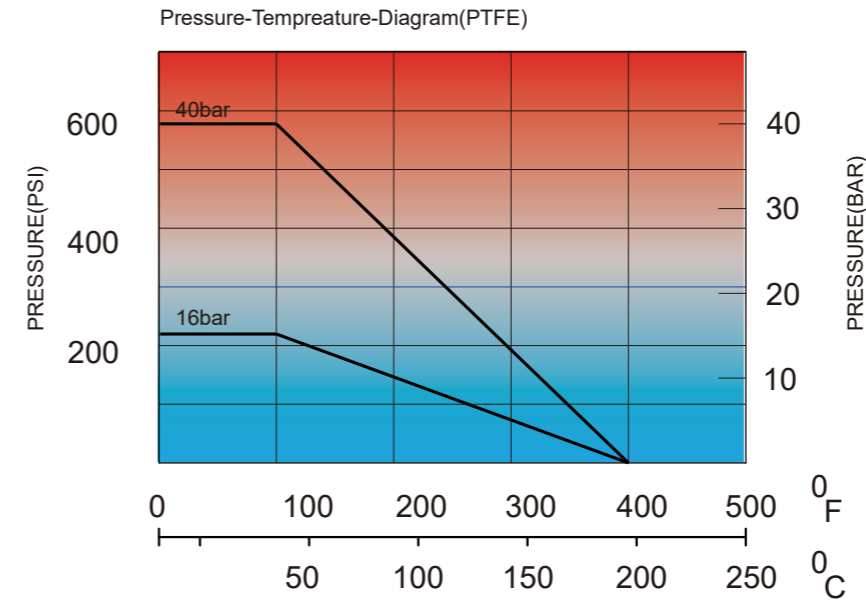
Lengthened handle
Electrical position indicator
Handwheel device

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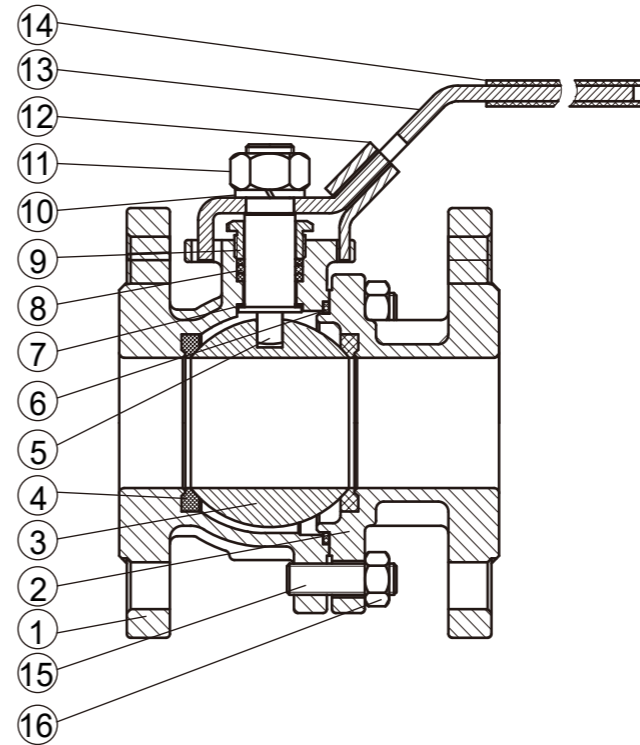


Type:
BZ
Manual 2-PC flange ball valve
Manual 2-PC flange V ball valve
PN16/25/40
150LB/300LB
WCB
CF8
CF8M

Pressure - Temperature-Diagram



Parts list



Nr.	Description	Material
1	Body	WCB
		CF8
		CF8M
2	Cap	WCB
		CF8
		CF8M
3	Ball	304
		316
4	Seat	PTFE/PEEK/C-PTFE/S-PTFE/R-PTFE
		F316
5	Stem	F316
6	Gasket	PTFE/PEEK/C-PTFE/S-PTFE/R-PTFE
7	Shaft seal	PTFE/PEEK/C-PTFE/S-PTFE/R-PTFE
8	Packing	PTFE/PEEK/C-PTFE/S-PTFE/R-PTFE
9	Gland	CF8
10	Spring Washer	304
11	Stem Nut	8
12	Locking Position	304
13	Handle	304
14	Plastic cover	plastic
15	Bolt	B7
		B8
16	Stem Nut	2H
		8

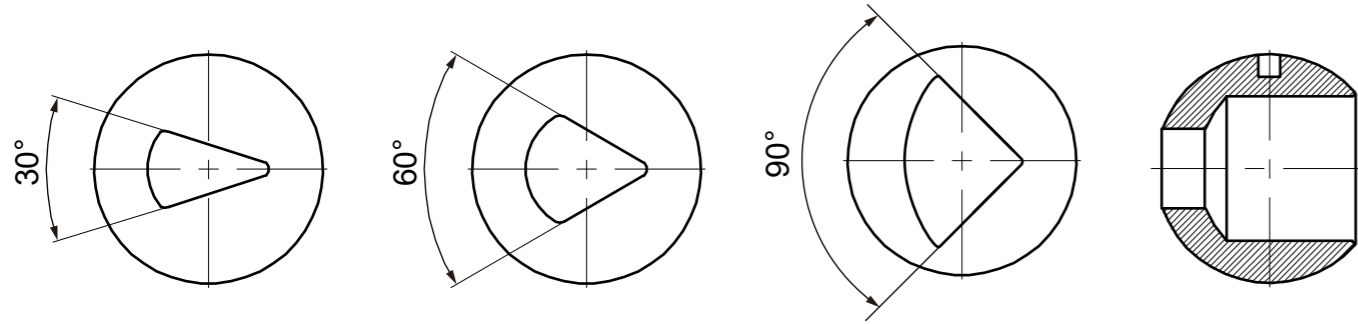
Ordering example: e.g. BZA2323718

=2-piece flange ball valve,WCB/304,PTFE,PN16, DIN Flange,DN50 Ball valve

A. Type	B+C. Body/Trim	D. Seal	E. Standard pressure	F. Connection	G + H. Size	
BZA=Manual 2-piece flange ball valve Full bore	23=WCB/304 24=WCB/316 33=CF8/304	2=PTFE K=PEEK 9=S-PTFE	3=PN16/150LB 4=PN25 5=PN40/300LB	7=DIN Flange M=ASME Flange 6=GB Flange	13=1/2" 14=3/4" 15=1"	20=3" 21=4" 22=5"
BZH=Manual 2-piece flange ball valve 30°Reduced bore	44=CF8M/316	3=R-PTFE C=C-PTFE			16=1-1/4" 17=1-1/2" 18=2"	23=6" 24=8" 25=10"
BZJ=Manual 2-piece flange ball valve 45°Reduced bore					19=2-1/2"	26=12"
BZK=Manual 2-piece flange ball valve 60°Reduced bore						

EICMATION V Ball valve flow coefficients Cv chart table

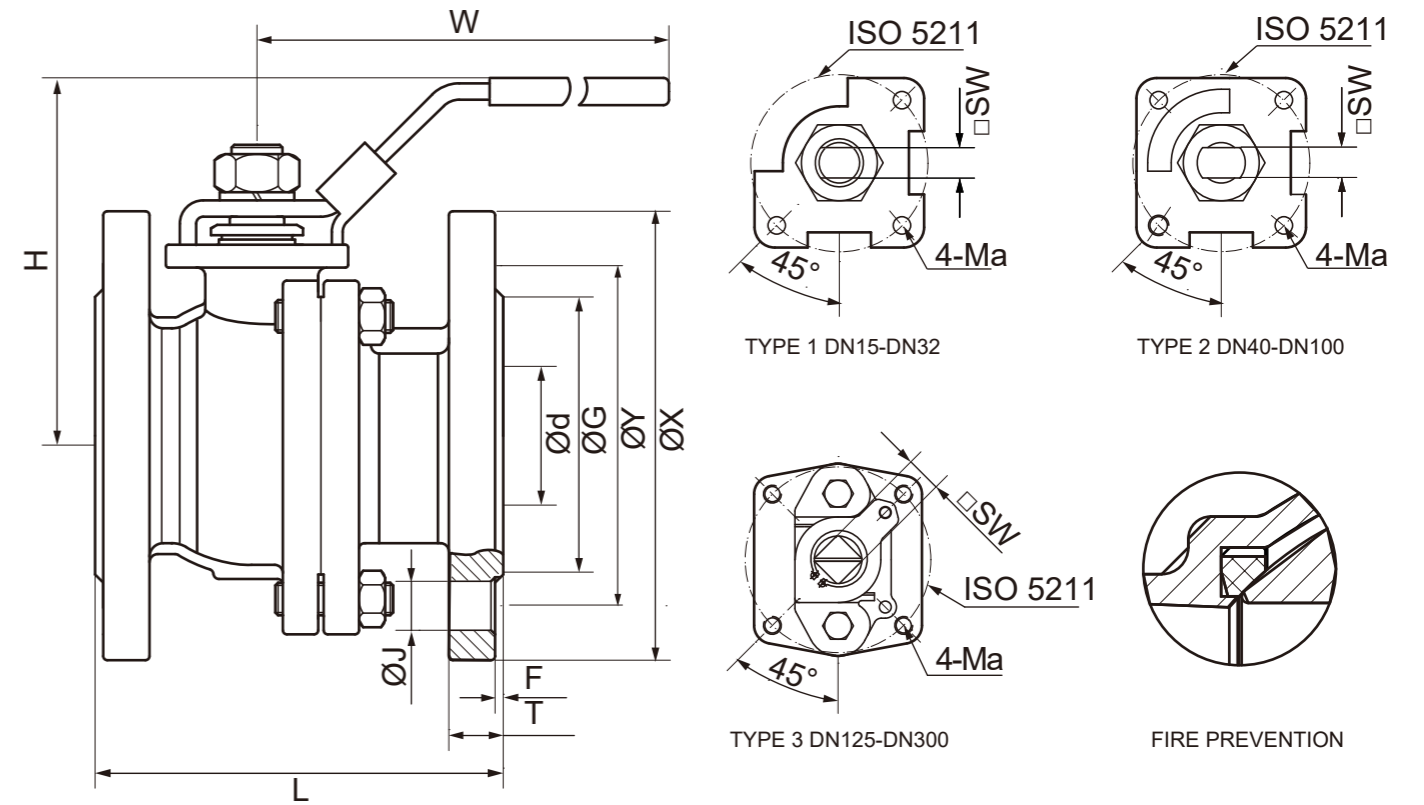
30°/60°/90° V Ball valve



VALVE SIZE	V ANGLE	0%	15%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1/2"	30	0	0.1	0.1	0.2	0.3	0.5	0.8	1.1	1.6	2.2	2.6
	60	0	0.1	0.1	0.3	0.5	0.9	1.4	2	3.3	4.4	6
	90	0	0.1	0.2	0.4	0.6	0.9	1.5	2.2	3.8	5.4	6.9
3/4"	30	0	0.1	0.2	0.5	0.7	1.1	1.8	2.4	3.3	4.5	5.4
	60	0	0.1	0.2	0.7	1	1.7	2.8	4	6.5	9	12
	90	0	0.2	0.4	0.8	1.2	2	3.1	4.6	8	11.3	14
1"	30	0	0.1	0.3	0.8	1.3	2.3	3.5	5.1	9.8	8.5	10
	60	0	0.2	0.4	1.1	1.8	3.4	5.3	7.9	12.3	15.3	21
	90	0	0.2	0.6	1.8	3.4	5.1	8.1	11.4	16	21	29
1 1/4"	30	0	0.2	0.4	1.1	2	3.7	5.5	8	10	13	15
	60	0	0.2	0.6	1.8	3	5.5	9.5	12.8	19	26	39
	90	0	0.3	0.8	2	5	8	14	19	28	39	55
1 1/2"	30	0	0.3	0.6	1.6	3	5	7.5	11	14	17	20
	60	0	0.4	0.8	2.5	4	8	13	19	27	40	52
	90	0	0.4	0.9	3.5	7	13	20	31	42	63	78
2"	30	0	0.4	1.2	3.8	6	10	15	23	31	43	60
	60	0	0.4	1.5	4.6	9	16.5	27	39	55	83	110
	90	0	0.5	2	6	12	22	35	45	70	105	135
2 1/2"	30	0	0.4	1	4	8	12	18	28	37	62	75
	60	0	0.4	1.5	5	10	21	34	53	75	103	150
	90	0	0.5	1.7	7	14	28	48	70	106	160	218
3"	30	0	0.5	1.2	4	8	14	23	33	46	65	82
	60	0	0.5	2.5	6	14	25	40	65	91	128	165
	90	0	0.7	3.5	8	18	35	60	90	135	205	310
4"	30	0	0.6	2	6	15	29	48	71	100	130	159
	60	0	0.7	3	11	25	40	59	90	141	212	356
	90	0	1	3.5	16	40	75	125	190	295	442	670
6"	30	0	0.9	3.2	14	33	60	103	155	220	280	350
	60	0	2	5	22	60	110	190	285	416	586	800
	90	0	3	8	35	90	160	280	425	650	970	1480

Dimension

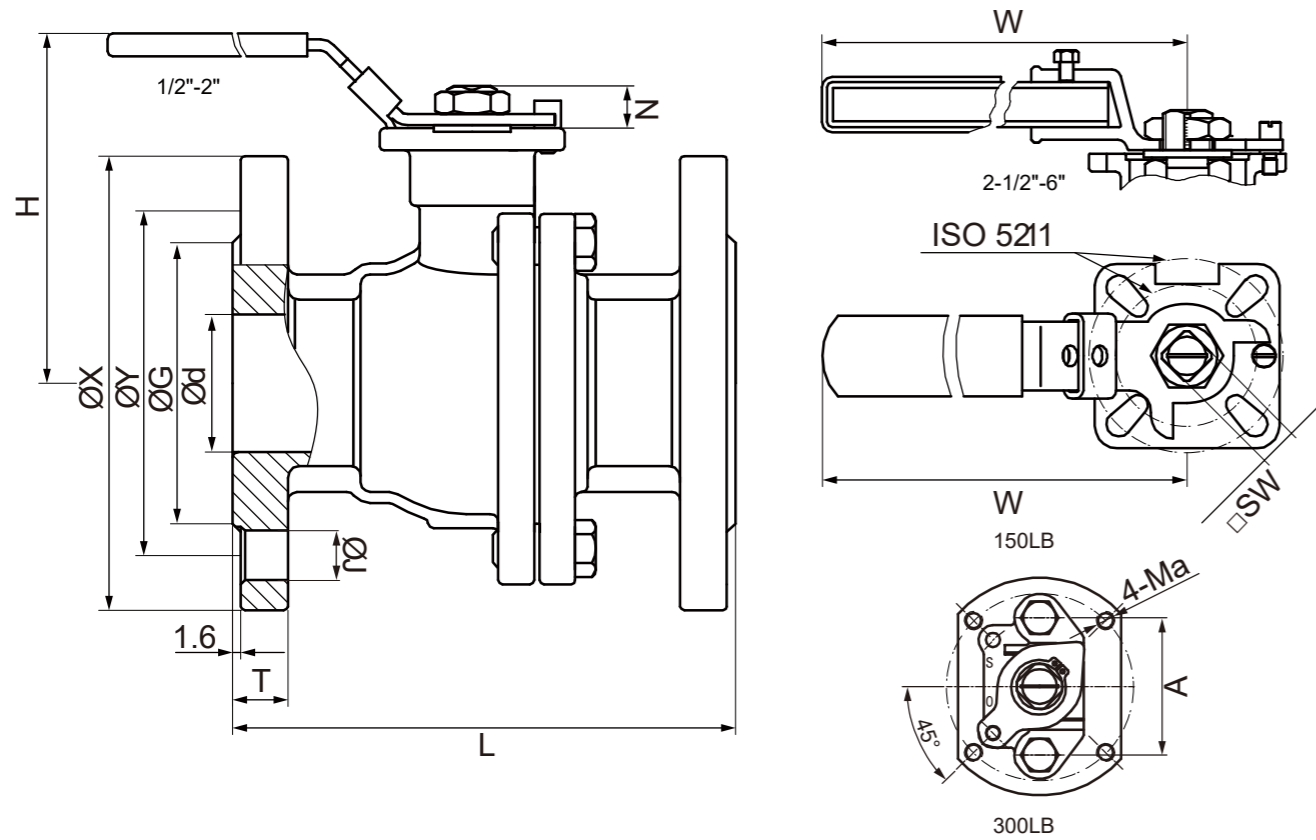
DIN FLANGE PN16/PN25/PN40



SIZE	DN	Ød	L	H	W	F	ISO5211	□SW	Ma	PN16					PN25/PN40				
										ØX	ØY	ØG	T	ØJ	ØX	ØY	ØG	T	ØJ
1/2"	15	15	115	76	153	2	F04	8	M5	95	65	45	16	4-Ø14	95	65	45	16	4-Ø14
3/4"	20	20	120	78	153	2	F04	8	M5	105	75	58	18	4-Ø14	105	75	58	18	4-Ø14
1"	25	25	125	92	188	2	F05	9.5	M6	115	85	68	18	4-Ø14	115	85	68	18	4-Ø14
1-1/4"	32	32	130	95	188	2	F05	9.5	M6	140	100	78	16	4-Ø18	140	100	78	18	4-Ø18
1-1/2"	40	40	140	126	245	3	F07	12	M8	150	110	88	16	4-Ø18	150	110	88	18	4-Ø18
2"	50	50	150	132	245	3	F07	12	M8	165	125	102	18	4-Ø18	165	125	102	20	4-Ø18
2-1/2"	65	65	170	166	288	3	F10	16	M10	185	145	122	18	4-Ø18	185	145	122	22	8-Ø18
3"	80	80	180	176	288	3	F10	16	M10	200	160	138	20	8-Ø18	200	160	138	24	8-Ø18
4"	100	100	190	190	388	3	F10	16	M10	220	180	158	20	8-Ø18	235	190	162	24	8-Ø22
5"	125	125	325	224	750	3	F12	24	M12	250	210	188	22	8-Ø18	-	-	-	-	-
6"	150	150	350	247	750	3	F12	24	M12	285	240	212	22	8-Ø22	-	-	-	-	-
8"	200	200	400	305	1000	3	F12	32	M12	340	295	268	24	12-Ø22	-	-	-	-	-
10"	250	250	450	327	1000	3	F14	32	M16	405	355	320	26	12-Ø26	-	-	-	-	-
12"	300	300	500	355	1000	4	F14	32	M16	460	410	378	28	16-Ø26	-	-	-	-	-

Dimension

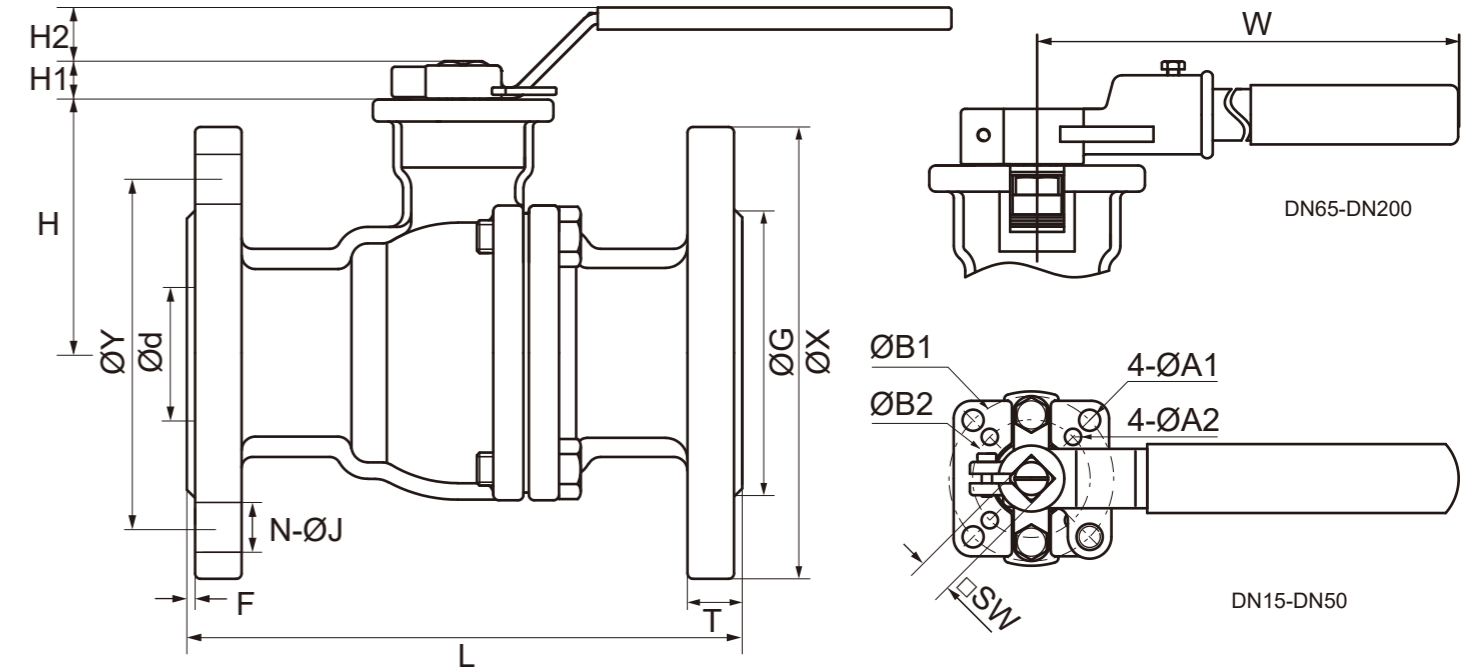
ASME FLANGE 150LB/300LB



SIZE	DN	Ød	ØG	150LB										300LB									
				ØX	ØY	T	L	H	W	N	ØJ	□SW	ISO5211	ØX	ØY	T	L	H	W	A	ØJ	□SW	ISO5211
1/2"	15	15	35	89	60.5	11.1	108	84	123	9	4-Ø16	9	F03-F04	95	66.5	14.3	140	92	160	50	4-Ø16	12	F04
3/4"	20	20	43	98	70	11.1	117	94	123	9	4-Ø16	9	F03-F04	117	82.5	15.9	152	98	160	50	4-Ø19	12	F04
1"	25	25	51	108	79.5	11.1	127	101	153	11	4-Ø16	11	F04-F05	124	89	17.5	165	103	160	50	4-Ø19	12	F05
1-1/4"	32	32	64	117	89.5	12.7	140	108	153	11	4-Ø16	11	F04-F05	133	98.5	19.1	178	107	160	50	4-Ø19	12	F05
1-1/2"	40	40	73	127	98.5	14.3	165	121	183	14	4-Ø16	14	F05-F07	156	114.5	20.7	190	112	230	62	4-Ø22	17	F07
2"	50	50	92	152	120.5	15.9	178	127	183	14	4-Ø19	14	F05-F07	165	127	22.3	216	122	230	62	8-Ø19	17	F07
2-1/2"	65	65	105	178	139.5	17.5	190	154	352	17	4-Ø19	17	F07-F10	190	149	25.4	241	151	350	75	8-Ø22	21	F07
3"	80	80	127	190	152.5	19.1	203	165	352	17	4-Ø19	17	F07-F10	210	168	28.6	283	161	350	75	8-Ø22	21	F10
4"	100	100	157	229	190.5	23.9	229	183	397	22	8-Ø19	22	F10-F12	254	200	31.8	305	175	350	75	8-Ø22	21	F10
6"	150	150	216	279	241.5	25.4	394	248	708	27	8-Ø22	27	F10-F12	318	270	36.6	403	247	750	89	12-Ø22	24	F12
8"	200	200	270	343	298.5	28.6	457	304	920	36	8-Ø22	36	F14	381	330	41.3	502	305	1000	100	12-Ø25	32	F12

Dimension

GB FLANGE PN16/PN25/PN40



SIZE	DN	Ød	H	H1	F	W	ØA2	ØA1	ØB2	ØB1	□SW	PN16					PN25					PN40							
												ØX	ØG	ØY	L	T	N-ØJ	ØX	ØG	ØY	L	T	N-ØJ	ØX	ØG	ØY	L	T	N-ØJ
1/2"	15	15	51	9	2	135	7	8	36	50	9	95	45	65	130	16	4-Ø14	95	45	65	130	16	4-Ø14	95	45	65	130	16	4-Ø14
3/4"	20	20	55	9	2	135	7	8	36	50	9	105	58	75	130	18	4-Ø14	105	58	75	130	18	4-Ø14	105	58	75	130	18	4-Ø14
1"	25	25	68	11	2	170	7	8	42	50	11	115	68	85	140	18	4-Ø14	115	68	85	140	18	4-Ø14	115	68	85	140	18	4-Ø14
1-1/4"	32	32	74	11	2	170	7	8	42	50	11	140	78	100	165	18	4-Ø18	140	78	100	165	18	4-Ø18	140	78	100	165	18	4-Ø18
1-1/2"	40	40	82	14	2	200	8	10	50	70	14	150	88	110	165	18	4-Ø18	150	88	110	165	18	4-Ø18	150	88	110	165	18	4-Ø18
2"	50	50	92	14	2	200	8	10	50	70	14	165	102	125	203	20	4-Ø18	165	102	125	203	20	4-Ø18	165	102	125	203	20	4-Ø18
2-1/2"	65	65	116	17	2	300	10	12	70	102	17	185	122	145	222	18	8-Ø18	185	122	145	241	22	8-Ø18	185	122	145	241	22	8-Ø18
3"	80	80	129	17	2	300	10	12	70	102	17	200	138	160	241	20	8-Ø18	200	138	160	283	24	8-Ø18	200	138	160	283	24	8-Ø18
4"	100	100	148	22	2	400	-	12	-	102	22	220	158	180	305	20	8-Ø18	235	162	190	305	24	8-Ø22	235	162	190	305	24	8-Ø22
5"	125	125	184	27	2	800	14	18	125	140	27	250	188	210	356	22	8-Ø18	270	188	220	381	26	8-Ø26	270	188	220	381	26	8-Ø26
6"	150	150	206	27	2	800	14	18	125	140	27	285	212	240	394	22	8-Ø22	300	218	250	403	28	8-Ø26	300	218	250	403	28	8-Ø26
8"	200	200	254	27	2	800	18	22	140	165	27	340	268	295	457	24	12-Ø22	360	278	310	502	30	12-Ø26	375	285	320	502	34	12-Ø30



Specification

DESIGN

2-piece design full bore, mounting pad for actuator according to ISO 5211. Anti-static and Fireproof structure Design: ASME B16.34

OPERATION

Handle 90° rotation

CONNECTION

End flange standard: DIN2633 HG/T20592 ASME B16.5 HG/T20615 GB/T 9113

FACE TO FACE LENGTH

DIN3202 F4/F5 GB/T12221 series12

NOMINAL PRESSURE

PN16/PN25/40 150LB/300LB

TEMPERATURE RANGE

PTFE: -30°C - +180°C
S-PTFE: -30°C - +200°C
PEEK: -40°C - +250°C
R-PTFE: -30°C - +200°C
C-PTFE: -20°C - +180°C
TFM4215: -25°C - +220°C

MATERIALS

Body: WCB
CF8
CF8M

Ball: 304
316

Ball seal: PTFE/S-PTFE/PEEK
R-PTFE/C-PTFE/TFM4215

Valve stem seal: PTFE/R-PTFE/Graphite

Handle: SUS

OPTIONS

Lengthened handle
Electrical position indicator
Handwheel device

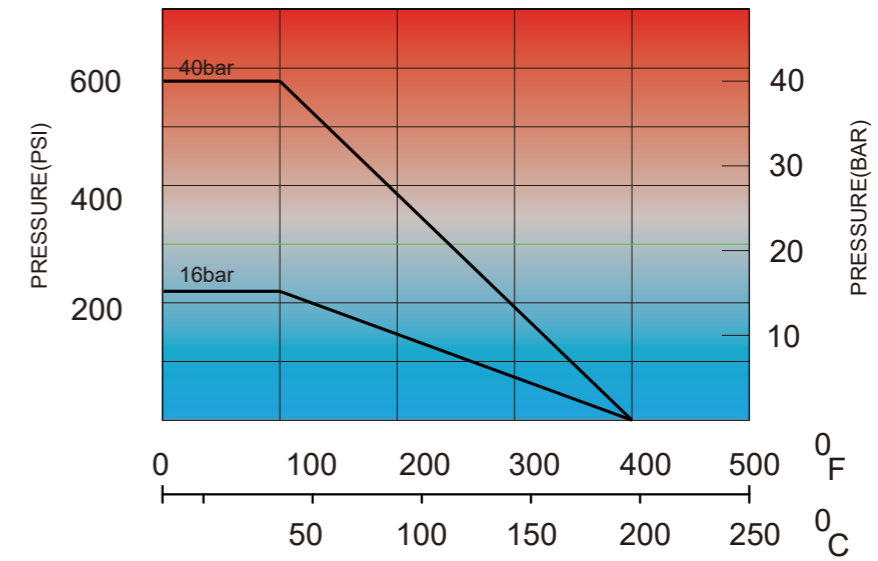
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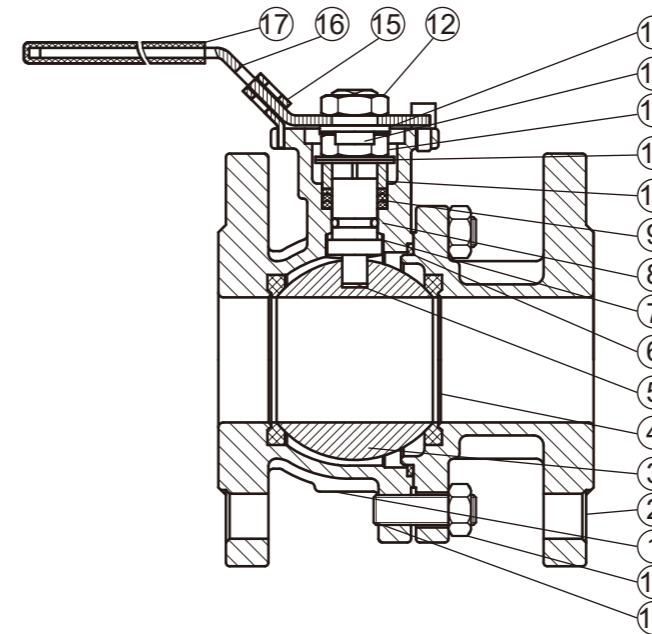
Type:
BH
ISO 5211 2-piece flange ball valve/2-piece flange V ball valve
Full bore
PN 16/25/40
150LB/300LB
WCB
CF8
CF8M

Pressure - Temperature-Diagram

Pressure-Temperature-Diagram(PTFE)



Parts list



Nr.	Description	Material
1	Body	WCB
		CF8
		CF8M
2	Cap	WCB
		CF8
3	Ball	304
		316
4	Seat	PTFE/PEEK/C-PTFE/S-PTFE/R-PTFE
5	Stem	F304 F316
6	Gasket	PTFE/PEEK/C-PTFE/S-PTFE/R-PTFE
7	Shaft seal	PTFE/PEEK/C-PTFE/S-PTFE/R-PTFE
8	O-Ring	FKM
9	Packing	PTFE/PEEK/C-PTFE/S-PTFE/R-PTFE
10	Gland	CF8
11	Spring Washer	304
12	Stem Nut	8
13	Stop Washer	304
14	Handle Washer	304
15	Locking Position	304
16	Handle	304
17	Plastic Cover	plastic
18	Nut	2H 8
19	Spring Washer	304

Ordering example: e.g. BHA2322718

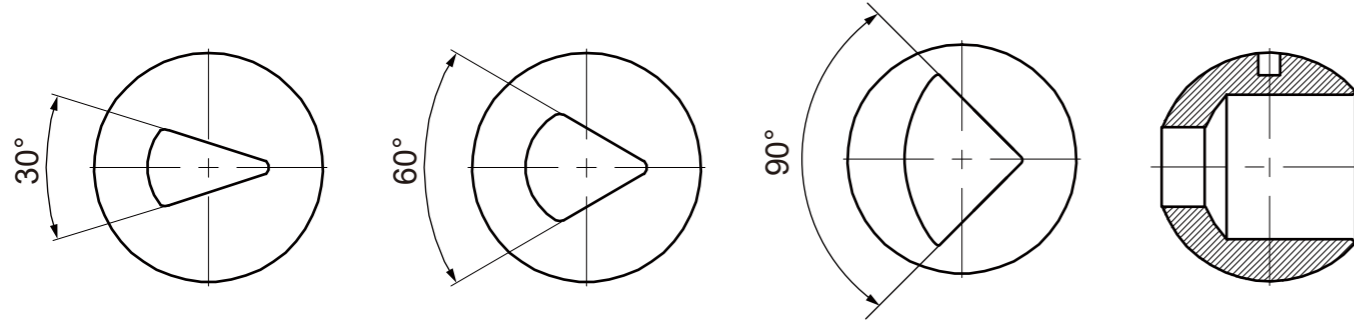
= 2-piece flange ball valve, WCB/304,PTFE, PN16,DIN Flange,DN50

Ball valve

A. Type	B+C. Body/Trim	D. Seal	E. Standard pressure	F. Connection	G + H. Size	
BHA=ISO 5211 2-piece Flange ball valve Full bore	23=WCB/304 24=WCB/316 33=CF8/304	2=PTFE K=PEEK 9=S-PTFE	3=PN16/150LB 4=PN25 5=PN40/300LB	7=DIN Flange M=ASME Flange 6=GB Flange	13=1/2" 14=3/4" 15=1" 16=1-1/4" 17=1-1/2" 18=2"	19=2-1/2" 20=3" 21=4" 22=5" 23=6" 24=8"
BHH=ISO 5211 2-piece 30° Flange ball valve	44=CF8M/316	3=R-PTFE C=C-PTFE				
BHJ=ISO 5211 2-piece 45° Flange ball valve						
BHK=ISO 5211 2-piece 60° Flange ball valve						

EICMATION V Ball valve flow coefficients Cv chart table

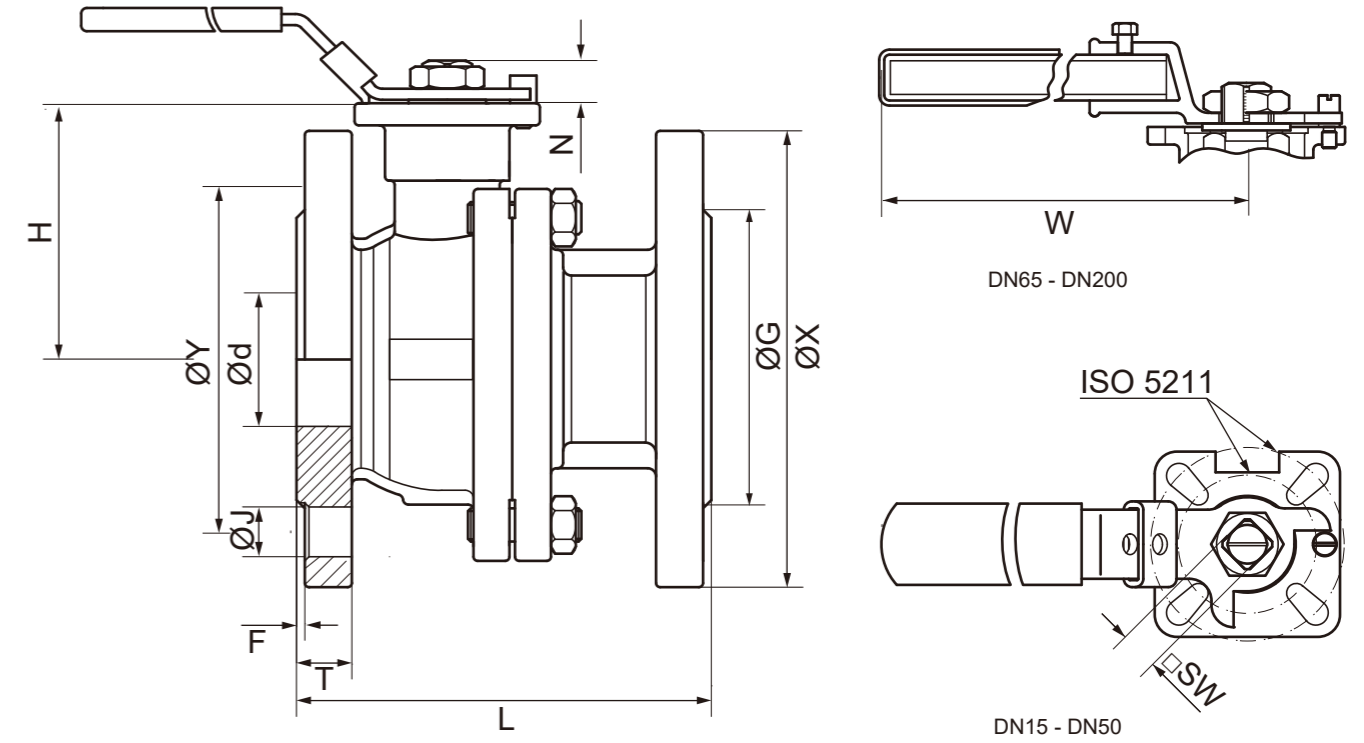
30°/60°/90° V Ball valve



VALVE SIZE	V ANGLE	0%	15%	20%	30%	40%	50%	60%	70%	80%	90%	100%
1/2"	30	0	0.1	0.1	0.2	0.3	0.5	0.8	1.1	1.6	2.2	2.6
	60	0	0.1	0.1	0.3	0.5	0.9	1.4	2	3.3	4.4	6
	90	0	0.1	0.2	0.4	0.6	0.9	1.5	2.2	3.8	5.4	6.9
3/4"	30	0	0.1	0.2	0.5	0.7	1.1	1.8	2.4	3.3	4.5	5.4
	60	0	0.1	0.2	0.7	1	1.7	2.8	4	6.5	9	12
	90	0	0.2	0.4	0.8	1.2	2	3.1	4.6	8	11.3	14
1"	30	0	0.1	0.3	0.8	1.3	2.3	3.5	5.1	9.8	8.5	10
	60	0	0.2	0.4	1.1	1.8	3.4	5.3	7.9	12.3	15.3	21
	90	0	0.2	0.6	1.8	3.4	5.1	8.1	11.4	16	21	29
1 1/4"	30	0	0.2	0.4	1.1	2	3.7	5.5	8	10	13	15
	60	0	0.2	0.6	1.8	3	5.5	9.5	12.8	19	26	39
	90	0	0.3	0.8	2	5	8	14	19	28	39	55
1 1/2"	30	0	0.3	0.6	1.6	3	5	7.5	11	14	17	20
	60	0	0.4	0.8	2.5	4	8	13	19	27	40	52
	90	0	0.4	0.9	3.5	7	13	20	31	42	63	78
2"	30	0	0.4	1.2	3.8	6	10	15	23	31	43	60
	60	0	0.4	1.5	4.6	9	16.5	27	39	55	83	110
	90	0	0.5	2	6	12	22	35	45	70	105	135
2 1/2"	30	0	0.4	1	4	8	12	18	28	37	62	75
	60	0	0.4	1.5	5	10	21	34	53	75	103	150
	90	0	0.5	1.7	7	14	28	48	70	106	160	218
3"	30	0	0.5	1.2	4	8	14	23	33	46	65	82
	60	0	0.5	2.5	6	14	25	40	65	91	128	165
	90	0	0.7	3.5	8	18	35	60	90	135	205	310
4"	30	0	0.6	2	6	15	29	48	71	100	130	159
	60	0	0.7	3	11	25	40	59	90	141	212	356
	90	0	1	3.5	16	40	75	125	190	295	442	670
6"	30	0	0.9	3.2	14	33	60	103	155	220	280	350
	60	0	2	5	22	60	110	190	285	416	586	800
	90	0	3	8	35	90	160	280	425	650	970	1480

Dimension

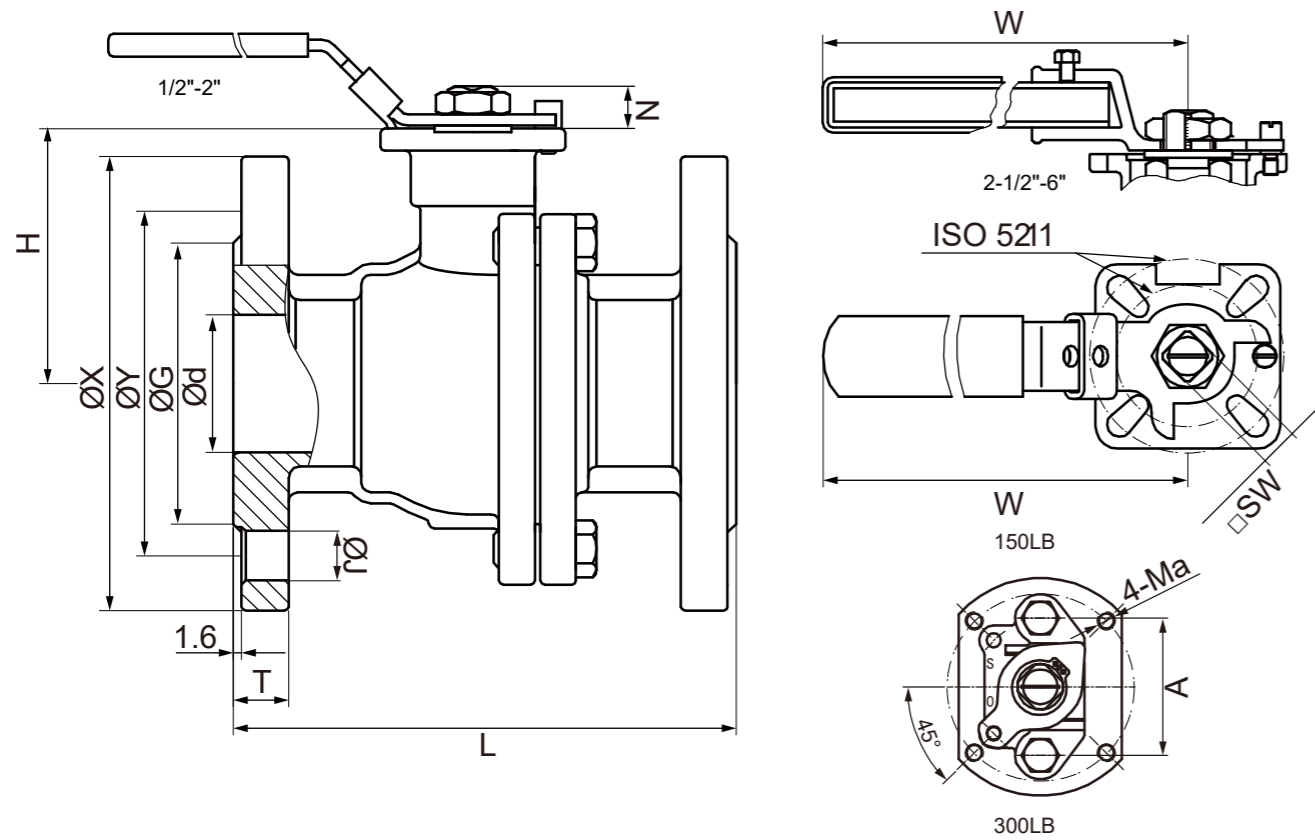
DIN FLANGE PN16/PN25/PN40



SIZE	DN	Ød	L	H	N	W	□SW	ISO-5211	F	PN16				PN25				PN40						
										ØX	ØY	ØG	T	ØJ	ØX	ØY	ØG	T	ØJ	ØX	ØY	ØG	T	ØJ
1/2"	15	15	115	48	9	123	9	F03-F04	2	95	65	45	14	4-Ø14	95	65	45	16	4-Ø14	95	65	45	16	4-Ø14
3/4"	20	20	120	53	9	123	9	F03-F04	2	105	75	58	16	4-Ø14	105	75	58	18	4-Ø14	105	75	58	18	4-Ø14
1"	25	25	125	64	11	153	11	F04-F05	2	115	85	68	16	4-Ø14	115	85	68	18	4-Ø14	115	85	68	18	4-Ø14
1-1/4"	32	32	130	71	11	153	11	F04-F05	2	140	100	78	16	4-Ø18	140	100	78	18	4-Ø18	140	100	78	18	4-Ø18
1-1/2"	40	40	140	76	14	183	14	F05-F07	3	150	110	88	16	4-Ø18	150	110	88	18	4-Ø18	150	110	88	18	4-Ø18
2"	50	50	150	85	14	183	14	F05-F07	3	165	125	102	18	4-Ø18	165	125	102	20	4-Ø18	165	125	102	20	4-Ø18
2-1/2"	65	65	170	104	17	352	17	F07-F10	3	185	145	122	18	4-Ø18	185	145	122	22	8-Ø18	185	145	122	22	8-Ø18
3"	80	80	180	114	17	352	17	F07-F10	3	200	160	138	20	8-Ø18	200	160	138	24	8-Ø18	200	160	138	24	8-Ø18
4"	100	100	190	140	22	397	22	F10-F12	3	220	180	158	20	8-Ø18	235	190	162	24	8-Ø22	235	190	162	24	8-Ø22
5"	125	125	325	183	27	708	27	F10-F12	3	250	210	188	22	8-Ø18	270	220	188	26	8-Ø26	270	220	188	26	8-Ø26
6"	150	150	350	202	27	708	27	F10-F12	3	285	240	212	22	8-Ø22	300	250	218	28	8-Ø26	300	250	218	28	8-Ø26
8"	200	200	400	253	36	920	36	F14	3	340	295	268	24	12-Ø22	360	310	278	30	12-Ø26	375	320	285	34	12-Ø30

Dimension

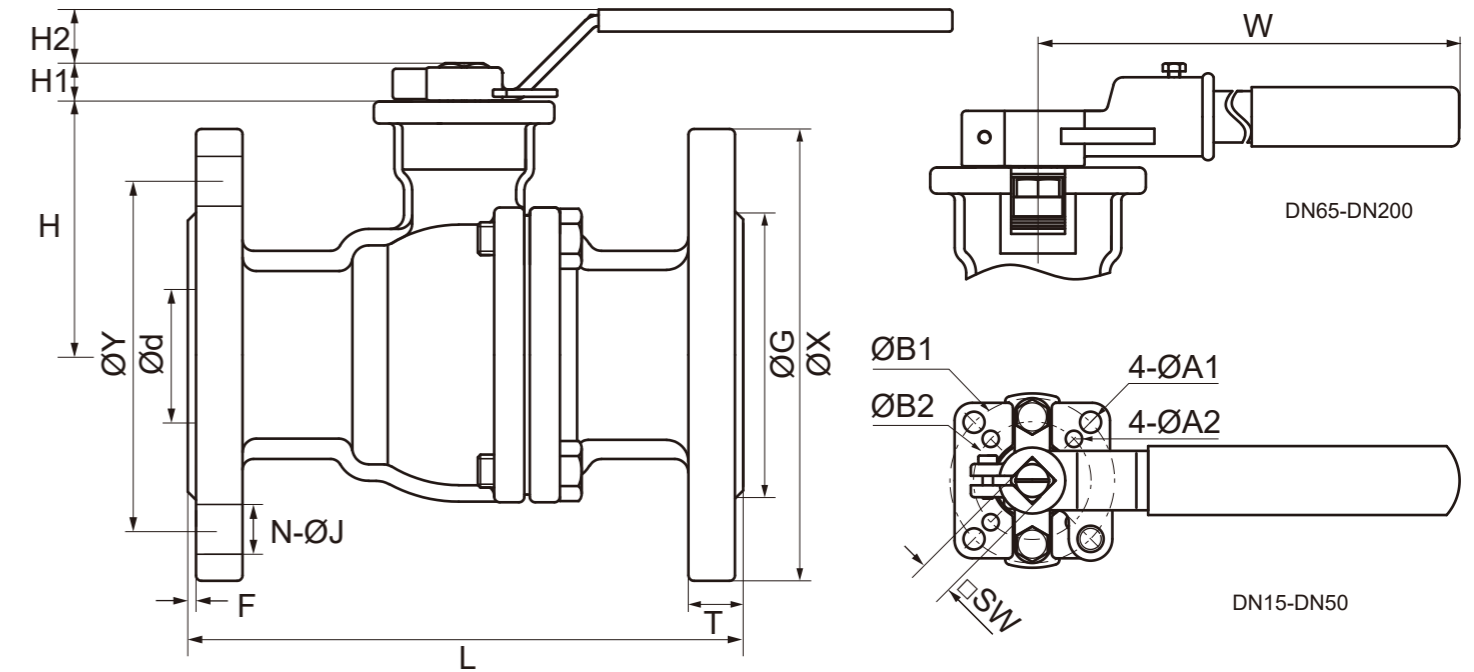
ASME FLANGE 150LB/300LB



SIZE	DN	Ød	ØG	150LB										300LB									
				ØX	ØY	T	L	H	W	N	ØJ	□SW	ISO5211	ØX	ØY	T	L	H	W	A	ØJ	□SW	ISO5211
1/2"	15	15	35	89	60.5	11.1	108	48	123	9	4-Ø16	9	F03-F04	95	66.5	14.3	140	48	160	50	4-Ø16	12	F04
3/4"	20	20	43	98	70	11.1	117	53	123	9	4-Ø16	9	F03-F04	117	82.5	15.9	152	53	160	50	4-Ø19	12	F04
1"	25	25	51	108	79.5	11.1	127	64	153	11	4-Ø16	11	F04-F05	124	89	17.5	165	64	160	50	4-Ø19	12	F05
1-1/4"	32	32	64	117	89.5	12.7	140	71	153	11	4-Ø16	11	F04-F05	133	98.5	19.1	178	71	160	50	4-Ø19	12	F05
1-1/2"	40	40	73	127	98.5	14.3	165	76	183	14	4-Ø16	14	F05-F07	156	114.5	20.7	190	76	230	62	4-Ø22	17	F07
2"	50	50	92	152	120.5	15.9	178	85	183	14	4-Ø19	14	F05-F07	165	127	22.3	216	85	230	62	8-Ø19	17	F07
2-1/2"	65	65	105	178	139.5	17.5	190	104	352	17	4-Ø19	17	F07-F10	190	149	25.4	241	104	350	75	8-Ø22	21	F07
3"	80	80	127	190	152.5	19.1	203	114	352	17	4-Ø19	17	F07-F10	210	168	28.6	283	114	350	75	8-Ø22	21	F10
4"	100	100	157	229	190.5	23.9	229	140	397	22	8-Ø19	22	F10-F12	254	200	31.8	305	140	350	75	8-Ø22	21	F10
6"	150	150	216	279	241.5	25.4	394	202	708	27	8-Ø22	27	F10-F12	318	270	36.6	403	202	750	89	12-Ø22	24	F12
8"	200	200	270	343	298.5	28.6	457	253	920	36	8-Ø22	36	F14	381	330	41.3	502	253	1000	100	12-Ø25	32	F12

Dimension

GB FLANGE PN16/PN25/PN40



SIZE	DN	Ød	H	H1	F	W	ØA2	ØA1	ØB2	ØB1	□SW	PN16					PN25					PN40							
												ØX	ØG	ØY	L	T	N-ØJ	ØX	ØG	ØY	L	T	N-ØJ	ØX	ØG	ØY	L	T	N-ØJ
1/2"	15	15	48	9	2	135	7	8	36	50	9	95	45	65	130	16	4-Ø14	95	45	65	130	16	4-Ø14	95	45	65	130	16	4-Ø14
3/4"	20	20	53	9	2	135	7	8	36	50	9	105	58	75	130	18	4-Ø14	105	58	75	130	18	4-Ø14	105	58	75	130	18	4-Ø14
1"	25	25	64	11	2	170	7	8	42	50	11	115	68	85	140	18	4-Ø14	115	68	85	140	18	4-Ø14	115	68	85	140	18	4-Ø14
1-1/4"	32	32	71	11	2	170	7	8	42	50	11	140	78	100	165	18	4-Ø18	140	78	100	165	18	4-Ø18	140	78	100	165	18	4-Ø18
1-1/2"	40	40	76	14	2	200	8	10	50	70	14	150	88	110	165	18	4-Ø18	150	88	110	165	18	4-Ø18	150	88	110	165	18	4-Ø18
2"	50	50	85	14	2	200	8	10	50	70	14	165	102	125	203	20	4-Ø18	165	102	125	203	20	4-Ø18	165	102	125	203	20	4-Ø18
2-1/2"	65	65	104	17	2	300	10	12	70	102	17	185	122	145	222	18	8-Ø18	185	122	145	241	22	8-Ø18	185	122	145	241	22	8-Ø18
3"	80	80	114	17	2	300	10	12	70	102	17	200	138	160	241	20	8-Ø18	200	138	160	283	24	8-Ø18	200	138	160	283	24	8-Ø18
4"	100	100	140	22	2	400	-	12	-	102	22	220	158	180	305	20	8-Ø18	235	162	190	305	24	8-Ø22	235	162	190	305	24	8-Ø22
5"	125	125	183	27	2	800	14	18	125	140	27	250	188	210	356	22	8-Ø18	270	188	220	381	26	8-Ø26	270	188	220	381	26	8-Ø26
6"	150	150	202	27	2	800	14	18	125	140	27	285	212	240	394	22	8-Ø22	300	218	250	403	28	8-Ø26	300	218	250	403	28	8-Ø26
8"	200	200	253	27	2	800	18	22	140	165	27	340	268	295	457	24	12-Ø22	360	278	310	502	30	12-Ø26	375	285	320	502	34	12-Ø30



Specification

DESIGN

2-piece design full bore, mounting pad for actuator according to ISO 5211. Anti-static and Fireproof structure Design: ASME B16.34

MATERIALS

Body: WCB
CF8
CF8M

OPERATION

Pneumatic double-acting or single-acting

Ball: 304
316

CONNECTION

End flange dimention: DIN2633 or HG/T20592
ASME B16.5 or HG/T20615
GB/T 9113

Ball seal: PTFE/S-PTFE/PEEK
R-PTFE/C-PTFE/TFM4215

Valve stem seal: PTFE/R-PTFE/Graphite

FACE TO FACE LENGTH

DIN3202 F4/F5
GB/T12221 series12

EXTERNAL TEMPERATURE RANGE

-20°C - +70°C

NOMINAL PRESSURE

PN16/PN25/PN40
150LB/300LB

PILOT MEDIA

Filtered gases (oil, ash and water removal)

PILOT PRESSURE

2-8 bar
(Low pilot pressure as required)

OPTIONS

3/2-ways 5/2-ways valve, electronic or physical Indicator, Positioner, Filter Reducer, Manual clutch

TEMPERATURE RANGE

PTFE: -30°C - +180°C
S-PTFE: -30°C - +200°C
PEEK: -40°C - +250°C
R-PTFE: -30°C - +200°C
C-PTFE: -20°C - +180°C
TFM4215: -25°C - +220°C

For further specifications please refer to the ball valve (BHA) and actuator(PA) data sheet

The above information is for reference only and Eicmation reserves the right to alter without prior notice



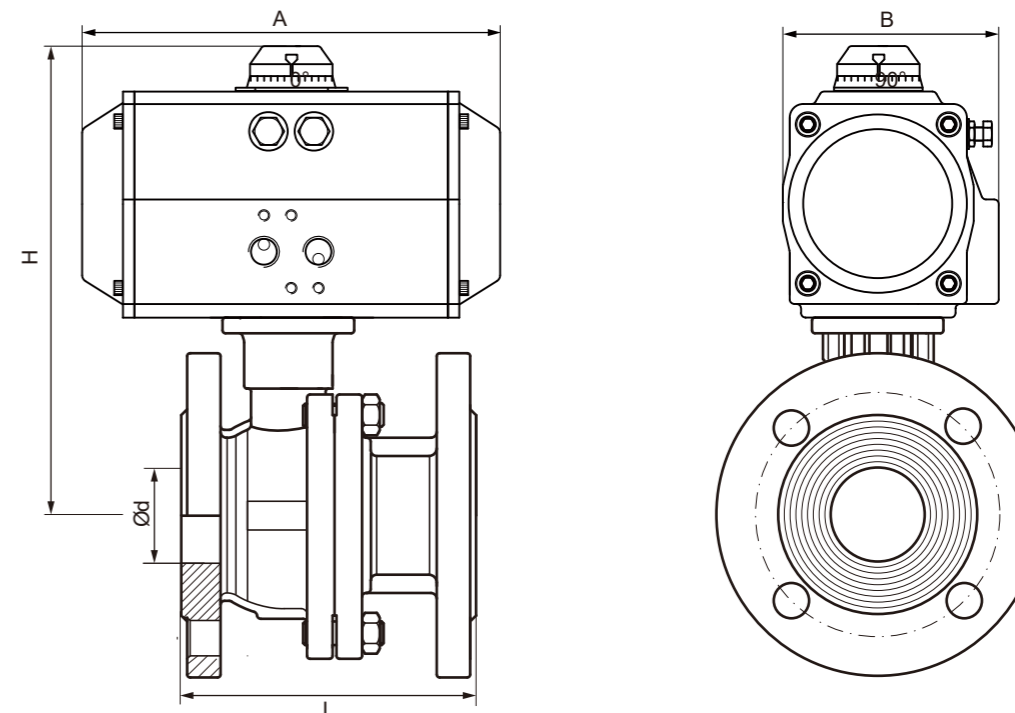
Type:
BH-PA

2-Piece pneumatic flange ball valve
Full bore
PN16/25/40/150LB/300LB

WCB
CF8
CF8M

Dimension

FLANGE PN16/150LB



SIZE	DN	Ød	Actuator		A	B	H	PN16	150LB
			Model	Size					
1/2"	15	15	PA1113110	Ø52	147	72	177	115	108
			PA2113110	Ø52	147	72	177		
3/4"	20	20	PA1113110	Ø52	147	72	187	120	117
			PA2114110	Ø63	172	83	203		
1"	25	25	PA1114110	Ø63	172	83	208	125	127
			PA2114110	Ø63	172	83	208		
1-1/4"	32	32	PA1114110	Ø63	172	83	215	130	140
			PA2115110	Ø75	184	95	227		
1-1/2"	40	40	PA1115110	Ø75	184	95	237	140	165
			PA2116110	Ø83	204	103	246		
2"	50	50	PA1116110	Ø83	204	103	252	150	178
			PA2117110	Ø92	262	109	260		
2-1/2"	65	65	PA1117110	Ø92	262	109	284	170	190
			PA2118110	Ø105	268	121	300		
3"	80	80	PA1118110	Ø105	268	121	311	180	203
			PA2119110	Ø125	301	143	331		
4"	100	100	PA1119110	Ø125	301	143	346	190	229
			PA2120110	Ø140	394	152	364		
5"	125	125	PA1120110	Ø140	394	152	405	325	-
			PA2121110	Ø160	458	174	430		
6"	150	150	PA1121110	Ø160	458	174	449	350	394
			PA2122110	Ø190	528	206	483		
8"	200	200	PA1122110	Ø190	528	206	530	400	457
			PA2123110	Ø210	532	226	555		

Note:Details please refer to BH ISO5211 two pieces flanged ball valve;
Above information is under normal working conditon, Please consult the technical department in case of special working conditions

Ordering example:e.g. BHA3322718-PA1115110

= 2-piece flange ball valve,CF8/304,PTFE,PN16,DIN Flange,DN50,Pneumatic actuator,Double acting,Anodising aluminam,Ø75mm,NBR,Gear, 0°-90°

Ball valve

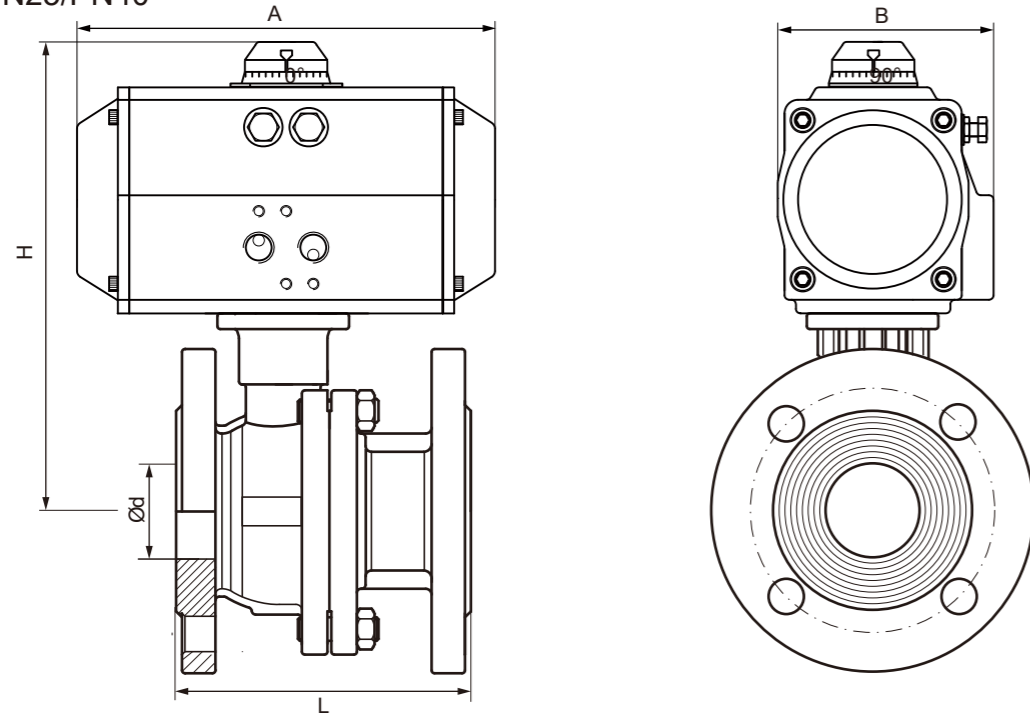
A . Type	B+C. Body/Trim	D. Seal	E. Standard pressure	F. Connection	G + H. Size
BHA=ISO 5211 2-piece Flange ball valve Full bore	23=WCB/304 24=WCB/316 33=CF8/304	2=PTFE K=PEEK 9=S-PTFE	3=PN16/150LB 4=PN25 5=PN40/300LB	7=DIN Flange M=ASME Flange 6=GB Flange	13=1/2" 19=2-1/2" 14=3/4" 20=3" 15=1" 21=4" 16=1-1/4" 22=5" 17=1-1/2" 23=6" 18=2" 24=8"
BHH=ISO 5211 2-piece 30° Flange ball valve	44=CF8M/316	3=R-PTFE C=C-PTFE			
BHJ=ISO 5211 2-piece 45° Flange ball valve					
BHK=ISO 5211 2-piece 60° Flange ball valve					

Actuator

I . Product	J. Fail position	K. Material	L + M. Size		N. Seal	O. Structure	P. Trip
PA=Pneumatic actuator	1=Double acting 2=Single acting-close 3=Single acting-open	1=Aluminium alloy 2=Stainless steel	13=Ø52 14=Ø63 15=Ø75 16=Ø83 17=Ø92 18=Ø105 19=Ø125 20=Ø140 21=Ø160	22=Ø190 23=Ø210 24=Ø240 25=Ø270 26=Ø300 27=Ø350 28=Ø400	1=NBR 2=HNBR 3=FKM	1=Gear	0=0-90° 1=0-120° 2=0-135° 3=0-150° 4=0-180° 5=0-270°

Dimension

FLANGE PN25/PN40

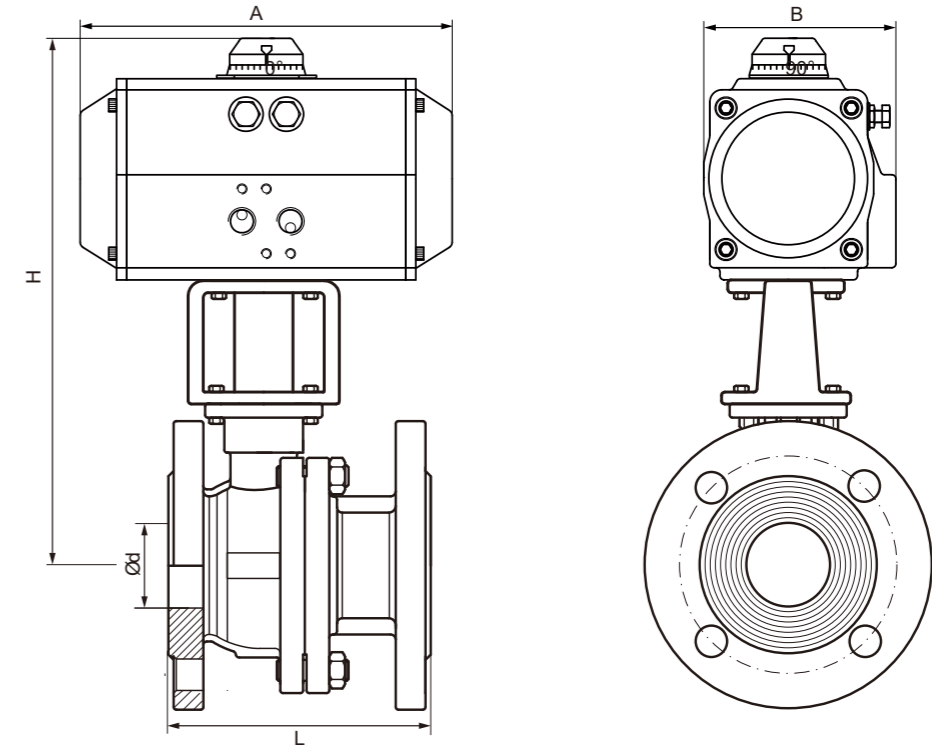


SIZE	DN	Ød	Actuator		A	B	H	L
			Model	Size				
1/2"	15	15	PA1113110	Ø52	147	82	167	130
			PA2114110	Ø63	147	82	183	
3/4"	20	20	PA1114110	Ø63	147	82	193	150
			PA2115110	Ø75	184	105	205	
1"	25	25	PA1114110	Ø63	147	82	198	160
			PA2115110	Ø75	184	105	210	
1-1/4"	32	32	PA1115110	Ø75	184	105	217	180
			PA2116110	Ø83	204	113	226	
1-1/2"	40	40	PA1115110	Ø75	184	105	227	200
			PA2116110	Ø83	204	113	236	
2"	50	50	PA1116110	Ø83	204	113	242	230
			PA2117110	Ø92	262	119	250	
2-1/2"	65	65	PA1117110	Ø92	262	119	274	290
			PA2118110	Ø105	268	131	290	
3"	80	80	PA1118110	Ø105	268	131	301	310
			PA2119110	Ø125	301	153	323	
4"	100	100	PA1119110	Ø125	301	153	336	350
			PA2120110	Ø140	394	162	354	
5"	125	125	PA1120110	Ø140	394	162	395	400
			PA2121110	Ø160	458	184	420	
6"	150	150	PA1121110	Ø160	458	184	439	450
			PA2122110	Ø190	528	206	483	
8"	200	200	PA1122110	Ø190	528	206	530	550
			PA2123110	Ø210	532	226	555	

Note: Details please refer to BH ISO5211 two pieces flanged ball valve ;
Above information is under normal working condition, Please consult the technical department in case of special working conditions

Dimension

FLANGE 300LB

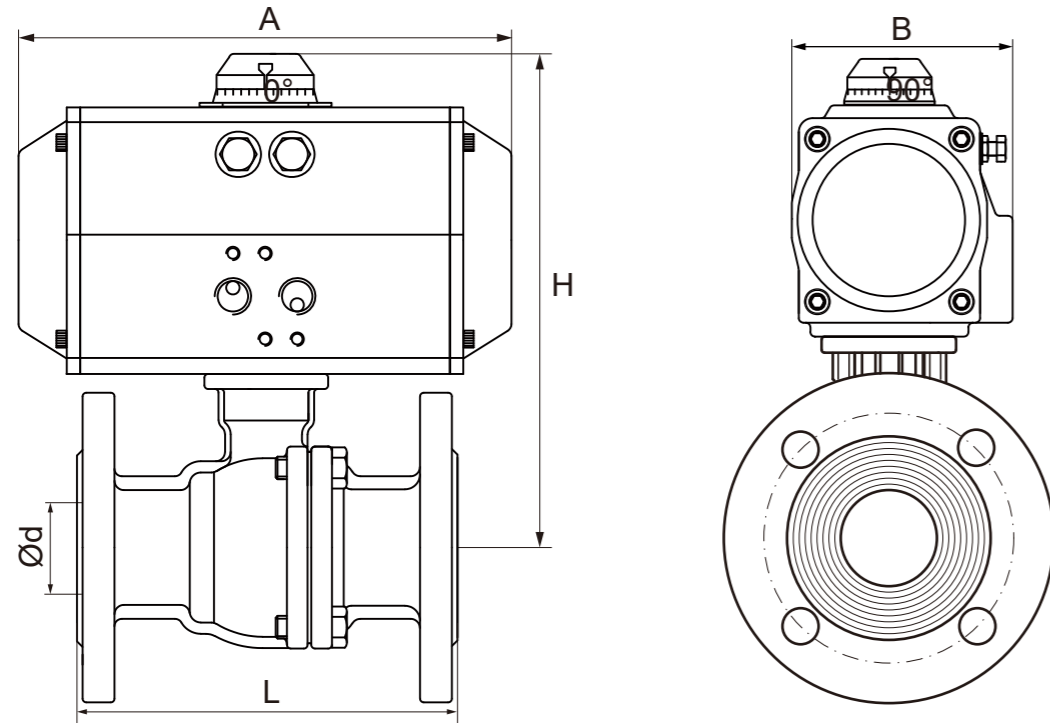


SIZE	DN	Ød	Actuator		A	B	H	L
			Model	Size				
1/2"	15	15	PA1113110	Ø52	147	72	268	140
			PA2114110	Ø63	147	72	284	
3/4"	20	20	PA1114110	Ø63	147	72	295	152
			PA2115110	Ø75	184	95	307	
1"	25	25	PA1114110	Ø63	147	72	298	165
			PA2115110	Ø75	184	95	310	
1-1/4"	32	32	PA1115110	Ø75	184	95	315	178
			PA2116110	Ø83	204	103	324	
1-1/2"	40	40	PA1115110	Ø75	184	95	326	190
			PA2116110	Ø83	204	103	335	
2"	50	50	PA1116110	Ø83	204	103	340	216
			PA2117110	Ø92	262	109	348	
2-1/2"	65	65	PA1117110	Ø92	262	109	360	241
			PA2118110	Ø105	268	121	376	
3"	80	80	PA1118110	Ø105	268	121	386	283
			PA2119110	Ø125	301	143	408	
4"	100	100	PA1119110	Ø125	301	143	430	305
			PA2120110	Ø140	394	152	448	
6"	150	150	PA1121110	Ø160	458	174	505	403
			PA2122110	Ø190	528	206	539	
8"	200	200	PA1122110	Ø190	528	206	571	502
			PA2123110	Ø210	532	226	596	

Note: Details please refer to BH ISO5211 two pieces flanged ball valve ;
Above information is under normal working condition, Please consult the technical department in case of special working conditions

Dimension

GB FLANGE PN16/PN25/PN40



SIZE	DN	Ød	PN16				PN25/PN40							
			Actuator		A	B	H	L	Actuator		A	B	H	L
			Model	Size					Model	Size				
1/2"	15	15	PA1113110	Ø52	147	72	153	130	PA1113110	Ø52	147	72	153	130
			PA2114110	Ø63	172	83	170		PA2114110	Ø63	172	83	170	
3/4"	20	20	PA1113110	Ø52	147	72	157	130	PA1114110	Ø63	172	83	173	130
			PA2114110	Ø63	172	83	173		PA2115110	Ø75	184	95	185	
1"	25	25	PA1114110	Ø63	172	83	186	140	PA1114110	Ø63	172	83	186	140
			PA2115110	Ø75	184	95	198		PA2115110	Ø75	184	95	198	
1-1/4"	32	32	PA1114110	Ø63	172	83	192	165	PA1115110	Ø75	184	95	204	165
			PA2115110	Ø75	184	95	204		PA2116110	Ø83	204	103	213	
1-1/2"	40	40	PA1115110	Ø75	184	95	212	165	PA1115110	Ø75	184	95	212	165
			PA2116110	Ø83	204	103	221		PA2116110	Ø83	204	103	221	
2"	50	50	PA1116110	Ø83	204	103	231	203	PA1116110	Ø83	204	103	231	203
			PA2117110	Ø92	262	109	239		PA2117110	Ø92	262	109	239	
2-1/2"	65	65	PA1117110	Ø92	262	109	263	222	PA1117110	Ø92	262	109	263	241
			PA2118110	Ø105	268	121	279		PA2118110	Ø105	268	121	279	
3"	80	80	PA1117110	Ø92	262	109	276	241	PA1118110	Ø105	268	121	292	283
			PA2118110	Ø105	268	121	292		PA2119110	Ø125	301	143	314	
4"	100	100	PA1119110	Ø125	301	143	333	305	PA1119110	Ø125	301	143	333	305
			PA2120110	Ø140	394	152	351		PA2120110	Ø140	394	152	351	
5"	125	125	PA1120110	Ø140	394	152	387	356	PA1120110	Ø140	394	152	387	381
			PA2121110	Ø160	458	174	412		PA2121110	Ø160	458	174	412	
6"	150	150	PA1121110	Ø160	458	174	434	394	PA1121110	Ø160	458	174	434	403
			PA2122110	Ø190	528	206	468		PA2122110	Ø190	528	206	468	
8"	200	200	PA1122110	Ø190	528	206	516	457	PA1122110	Ø190	528	206	516	502
			PA2123110	Ø210	532	226	541		PA2123110	Ø210	532	226	541	

Note: Details please refer to BH ISO5211 two pieces flanged ball valve;
Above information is under normal working condition, Please consult the technical department in case of special working conditions

Specification

DESIGN

2-piece design full bore, mounting pad for actuator according to ISO 5211.
Anti-static and Fireproof structure
Design: ASME B16.34

OPERATION

Electric include handle operation

CONNECTION

End Flange dimension: DIN2633 HG/T20592
ASME B16.5 HG/T20615
GB/T 9113

FACE TO FACE LENGTH

DIN3202 F4/F5
GB/T12221 series12

NOMINAL PRESSURE

PN16/PN25/40/150LB/300LB

TEMPERATURE RANGE

PTFE: -30°C - +180°C
S-PTFE: -30°C - +200°C
PEEK: -40°C - +250°C
R-PTFE: -30°C - +200°C
C-PTFE: -20°C - +180°C
TFM4215: -25°C - +220°C

MATERIALS

Body: WCB
CF8
CF8M

Ball: 304
316

Ball seal: PTFE/S-PTFE/PEEK
R-PTFE/C-PTFE/TFM4215

Valve stem seal: PTFE/R-PTFE/Graphite

EXTERNAL TEMPERATURE RANGE

-20°C - +60°C

OPTIONAL VOLTAGE

24V DC, 24V AC, 110V AC
220V AC, 380V AC

PROTECTIVE

IP 67

STANDARD EQUIPMENT

Additional limit switches, optical position indicator, manual override

OPTIONS

Dehumidification heater
Overtorque protection
Modulate type 4-20mA
Exd IIB T4

For further specifications please refer to the ball valve (BHA) and actuator (KL) data sheet

The above information is for reference only and Eicmation reserves the right to alter without prior notice

Ordering example: e.g. BHA2322718 - KL511111

=2-piece flange ball valve, WCB/304, PTFE, PN16, DIN Flange, DN50, Electric actuator 50Nm, 380V AC, On/Off+Ldry contact.

Ball valve

A . Type	B+C. Body/Internal	D. Seal	E. Standard pressure	F. Connection	G + H. Size
BHA=ISO 5211 2-piece Flange ball valve Full bore	23=WCB/304 24=WCB/316 33=CF8/304	2=PTFE K=PEEK 9=S-PTFE 3=R-PTFE C=C-PTFE	3=PN16 4=PN25/150LB 5=PN40/300LB	7=DIN Flange M=ASME Flange 6=GB Flange	13=1/2" 14=3/4" 15=1" 16=1-1/4" 17=1-1/2" 18=2"
BHH=ISO 5211 2-piece 30° Flange ball valve	44=CF8M/316				19=2-1/2" 20=3" 21=4" 22=5" 23=6" 24=8"
BHJ=ISO 5211 2-piece 45° Flange ball valve					
BHK=ISO 5211 2-piece 60° Flange ball valve					

Actuator

I . Type	J. Voltage	K. Explosion proof grade	L+M. Torque(NM)	N. Extra	O. Others
KL=Basic angle stroke Electric actuator	1=24V DC 2=24V AC 3=110V AC 4=220V AC 5=380V AC	1=None 2=Exd II BT4 (50-600NM)	11=50 13=100 15=200 17=400 19=600 21=1000 23=2000	1=On/Off type +Limit switch 2=Modulate type 4~20mA	1=No 2=1K~10K potentiometer 3=Current position sensor 4~20mA 4=Overload protection (200-2000NM) 8=Dehumidification



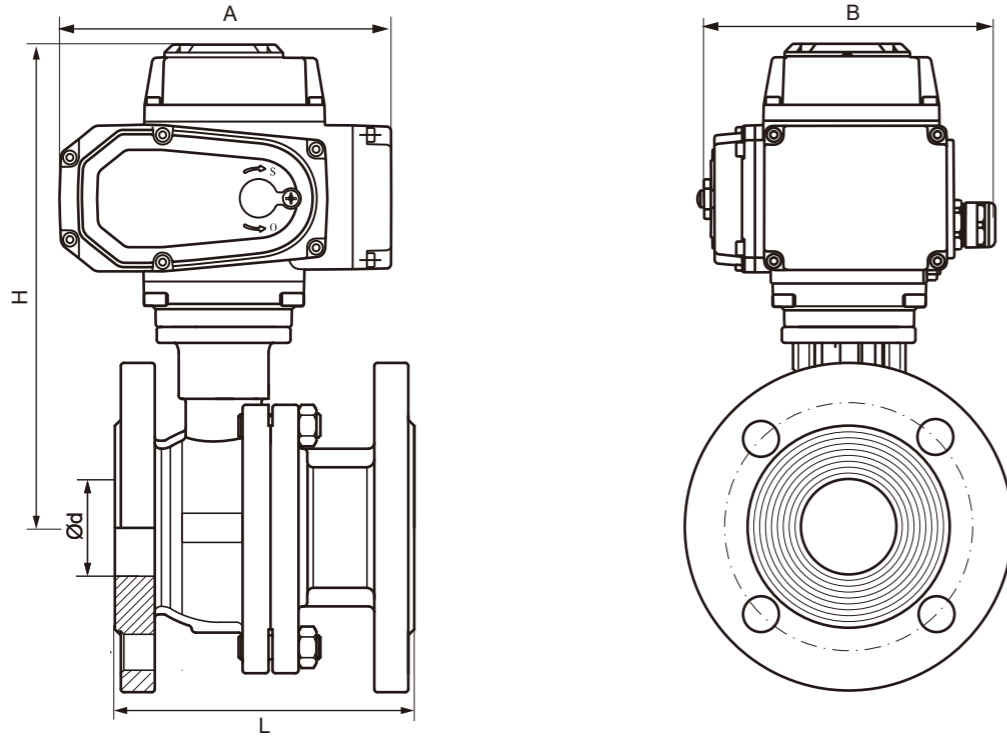
Type:
BH-KL

2-Piece electric flange
ball valve
Full bore
PN 16/25/40/150LB/300LB

WCB
CF8
CF8M

Dimension

FLANGE PN16/PN25/PN40/150LB

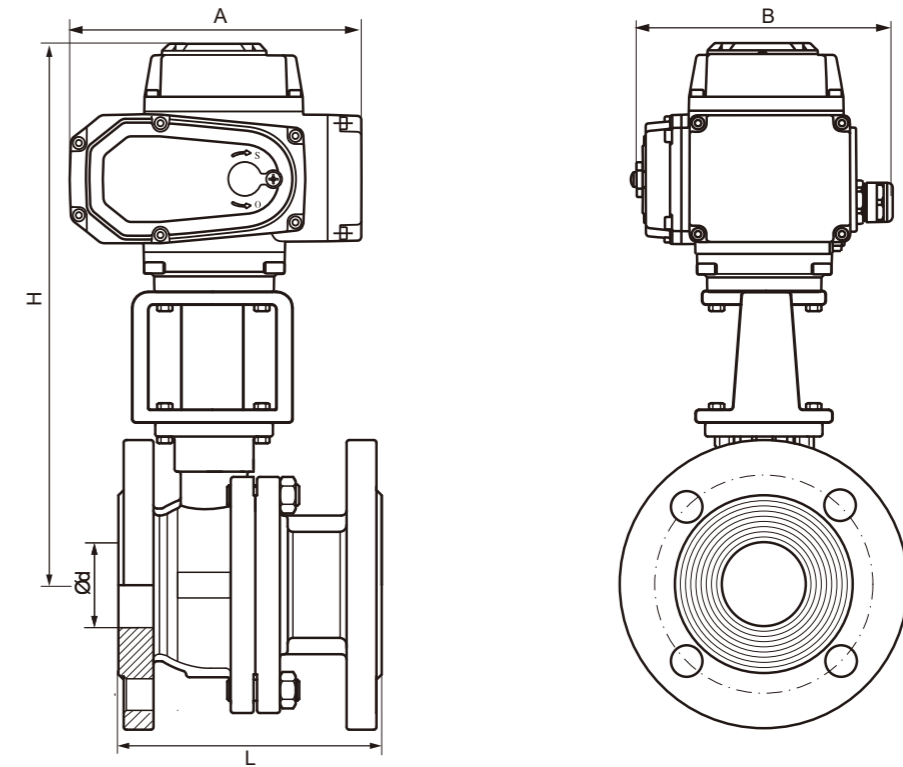


SIZE	DN	Ød	PN16/150LB						PN25/40						
			Actuator		A	B	H	L		Actuator		A	B	H	L
			Model	Torque(NM)				PN16	150LB	Model	Torque(NM)				
1/2"	15	15	KL111111	50	165	140.5	212.5	115	108	KL111111	50	165	140.5	212.5	130
			KL121111	50	170.5	120.5	225			KL121111	50	170.5	120.5	225	
3/4"	20	20	KL111111	50	165	140.5	222.5	120	117	KL111111	50	165	140.5	222.5	150
			KL121111	50	170.5	120.5	235			KL121111	50	170.5	120.5	235	
1"	25	25	KL111111	50	165	140.5	227.5	125	127	KL111111	50	165	140.5	227.5	160
			KL121111	50	170.5	120.5	240			KL121111	50	170.5	120.5	240	
1-1/4"	32	32	KL111111	50	165	140.5	234.5	130	140	KL111111	50	165	140.5	234.5	180
			KL121111	50	170.5	120.5	247			KL121111	50	170.5	120.5	247	
1-1/2"	40	40	KL111111	50	165	140.5	244.5	140	165	KL111111	50	165	140.5	244.5	200
			KL121111	50	170.5	120.5	257			KL121111	50	170.5	120.5	257	
2"	50	50	KL111311	100	211.5	154	281.5	150	178	KL111311	100	211.5	154	281.5	230
			KL121311	100	217.5	139	295			KL121311	100	217.5	139	295	
2-1/2"	65	65	KL111311	100	211.5	154	305.5	170	190	KL111311	100	211.5	154	305.5	290
			KL121311	100	217.5	139	319			KL121311	100	217.5	139	319	
3"	80	80	KL111311	100	211.5	154	316.5	180	203	KL111511	200	259	186	351	310
			KL121311	100	217.5	139	330			KL121511	200	217.5	139	330	
4"	100	100	KL111511	200	259	186	364	190	229	KL111711	400	259	186	364	350
			KL121511	200	217.5	139	343			KL121711	400	217.5	139	374	
5"	125	125	KL111711	400	259	186	405	325	356	KL111711	400	259	186	405	400
			KL121711	400	266.5	170	415			KL121711	400	266.5	170	415	
6"	150	150	KL111911	600	259	186	424	350	394	KL111911	600	259	186	424	450
			KL121911	600	266.5	170	434			KL121911	600	266.5	170	434	
8"	200	200	KL112111	1000	283	193	471	400	457	KL112111	1000	283	193	471	550

Note:Details please refer to BH ISO5211 two pieces flanged ball valve;
Above information is under normal working conditon, Please consult the technical department in case of special working conditions

Dimension

FLANGE 300LB

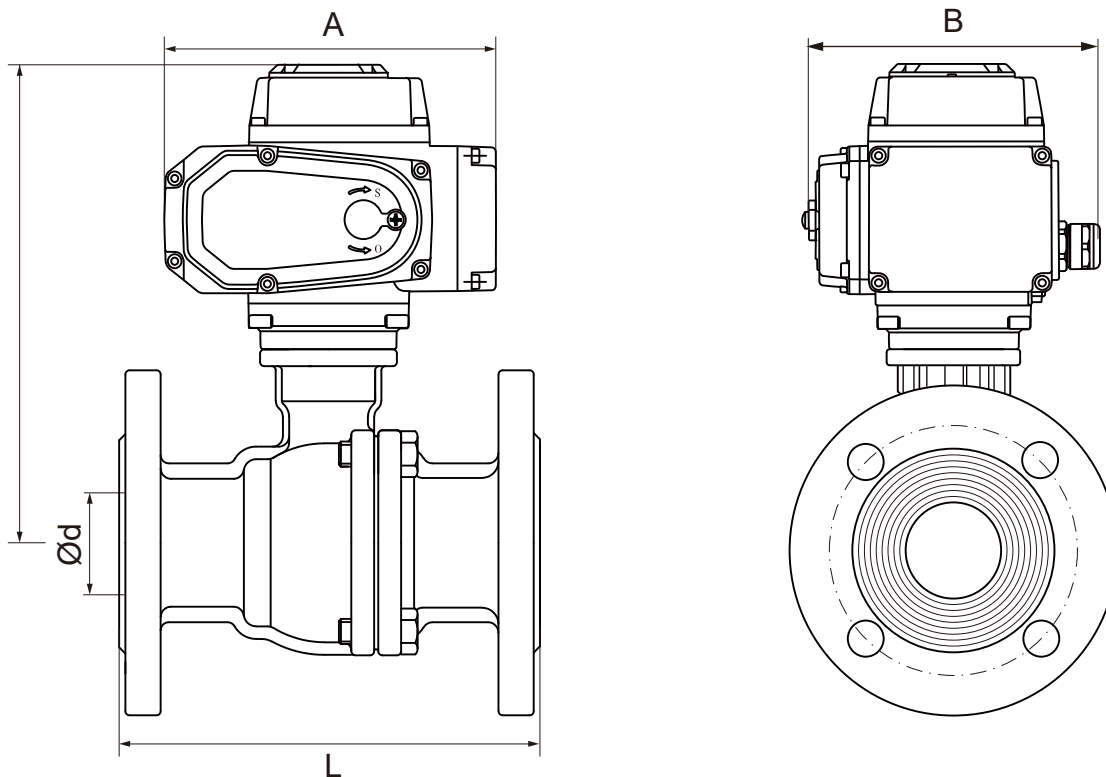


SIZE	DN	Ød	Actuator		A	B	H	L
			Model	Torque(NM)				
			1/2"	15	15	KL111111	50	165
KL121111	50	170.5				120.5	315.5	
3/4"	20	20	KL111111	50	165	140.5	314	152
			KL121111	50	170.5	120.5	326.5	
1"	25	25	KL111111	50	165	140.5	317.5	165
			KL121111	50	170.5	120.5	330	
1-1/4"	32	32	KL111111	50	165	140.5	322	178
			KL121111	50	170.5	120.5	334.5	
1-1/2"	40	40	KL111111	50	165	140.5	333.5	190
			KL121111	50	170.5	120.5	346	
2"	50	50	KL111311	100	211.5	154	369	216
			KL121311	100	217.5	139	382.5	
2-1/2"	65	65	KL111311	100	211.5	154	381.5	241
			KL121311	100	217.5	139	395	
3"	80	80	KL111511	200	259	186	426	283
			KL121511	200	217.5	139	405	
4"	100	100	KL111711	400	259	186	448	305
			KL121711	400	266.5	170	458	
5"	125	125	KL111711	400	259	186	475	381
			KL121711	400	266.5	170	486	
6"	150	150	KL111911	600	259	186	480	403
			KL121911	600	266.5	170	490	
8"	200	200	KL112111	1000	283	193	515.5	502

Note:Details please refer to BH ISO5211 two pieces flanged ball valve;
Above information is under normal working conditon, Please consult the technical department in case of special working conditions

Dimension

GB FLANGE PN16/PN25/PN40



SIZE	DN	Ød	PN16					PN25/PN40						
			Actuator		A	B	H	L	Actuator		A	B	H	L
			Model	Torque(NM)					Model	Torque(NM)				
1/2"	15	15	KL111111	50	165	140.5	188.5	130	KL111111	50	165	140.5	188.5	130
			KL121111	50	170.5	120.5	201		KL121111	50	170.5	120.5	201	
3/4"	20	20	KL111111	50	165	140.5	192.5	130	KL111111	50	165	140.5	192.5	130
			KL121111	50	170.5	120.5	205		KL121111	50	170.5	120.5	205	
1"	25	25	KL111111	50	165	140.5	205.5	140	KL111111	50	165	140.5	205.5	140
			KL121111	50	170.5	120.5	218		KL121111	50	170.5	120.5	218	
1-1/4"	32	32	KL111111	50	165	140.5	211.5	165	KL111111	50	165	140.5	211.5	165
			KL121111	50	170.5	120.5	224		KL121111	50	170.5	120.5	224	
1-1/2"	40	40	KL111111	50	165	140.5	219.5	165	KL111111	50	165	140.5	219.5	165
			KL121111	50	170.5	120.5	232		KL121111	50	170.5	120.5	232	
2"	50	50	KL111311	100	211.5	154	253.5	203	KL111311	100	211.5	154	253.5	203
			KL121311	100	217.5	139	267		KL121311	100	217.5	139	267	
2-1/2"	65	65	KL111311	100	211.5	154	284.5	222	KL111311	100	211.5	154	284.5	241
			KL121311	100	217.5	139	298		KL121311	100	217.5	139	298	
3"	80	80	KL111311	100	211.5	154	297.5	241	KL111511	200	259	186	317	283
			KL121311	100	217.5	139	311		KL121511	200	217.5	139	296	
4"	100	100	KL111511	200	259	186	351	305	KL111711	400	259	186	343	305
			KL121511	200	217.5	139	330		KL121711	400	266.5	170	353	
5"	125	125	KL111711	400	259	186	387	356	KL111711	400	259	186	387	381
			KL121711	400	266.5	170	397		KL121711	400	266.5	170	397	
6"	150	150	KL111911	600	259	186	405	394	KL111711	600	259	186	405	403
			KL121911	600	266.5	170	415		KL121711	600	266.5	170	415	
8"	200	200	KL112111	1000	283	193	482.5	457	KL112111	1000	283	193	482.5	502

Note: Details please refer to BH ISO5211 two pieces flanged ball valve;
Above information is under normal working condition, Please consult the technical department in case of special working conditions