

**Specification**

**DESIGN**  
 3-way ball valve  
 Reduced bore. "L" or "T" type.  
 Bi-directional seal.  
 Maintenance free  
 Top flange ISO5211.

**OPERATION**  
 Rotation of the handle through 90°

**CONNECTION**  
 DIN 2633 ASME B16.5 GB/T 9113  
 HG/T 20592

**NOMINAL PRESSURE**  
 PN16/PN25/PN40  
 150LB/300LB

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

**TEMPERATURE RANGE**  
 PTFE: -30°C - +120°C  
 R-PTFE: -30°C - +150°C  
 PEEK: -30°C - +200°C  
 TFM4215: -45°C - +220°C

**MATERIALS**

Body: WCB  
 CF8  
 CF8M

Ball: 304SS  
 316SS

Seat: PTFE/R-PTFE/PEEK/TFM4215

Packing: PTFE/R-PTFE/PEEK/TFM4215

Handle: SS

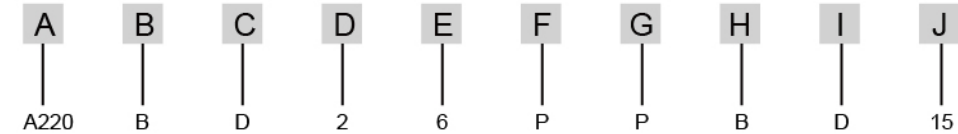
**OPTIONS**

Electrical position indicator  
 Handle  
 Handwheel device



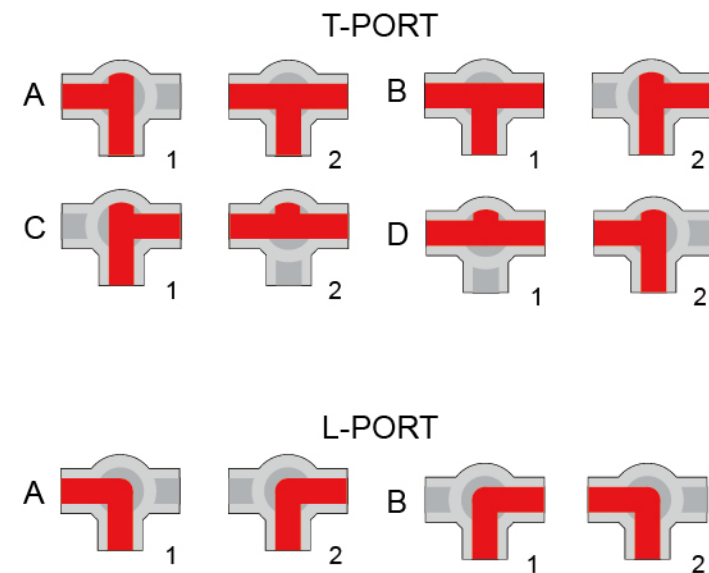
Type:  
 A220/221  
 Handle 3-way flange ball valve  
 Full bore  
 ISO5211 Mounting pad  
 PN16/PN25/PN40  
 150LB/300LB  
 WCB  
 CF8  
 CF8M

**Model code**

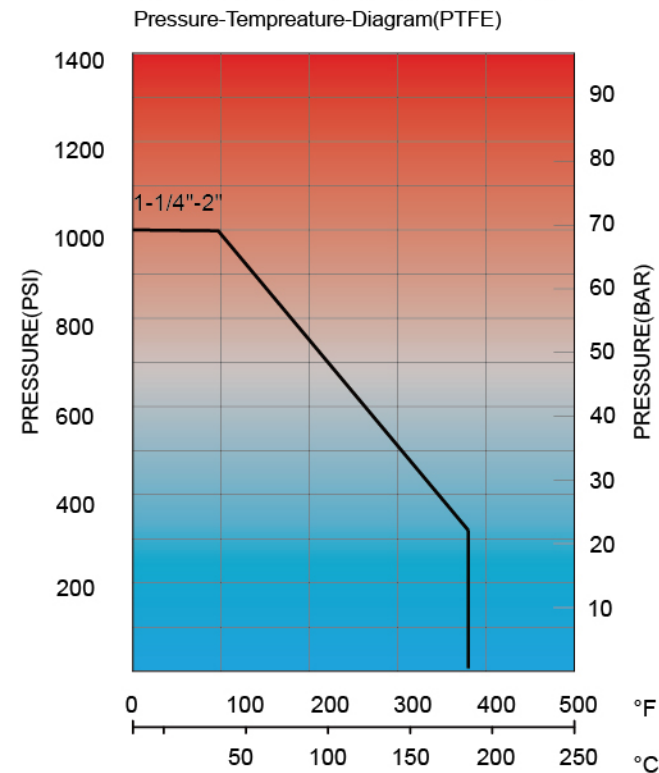


A. Product	B. Control	C. Type of actuator	D. Body
A220=3 way L Flanged Ball valve A221=3 way T Flanged Ball valve	A=Manual B=Pneumatic Piston Actuator P=Basic Electric Actuator 0=NONE	L=Lever W=Handwheel U=ISO5211 Lever D=Double Acting S=Single Acting FC P=Single Acting FO E=220VAC Electric Actuator(ON/OFF) F=24VDC Electric Actuator(ON/OFF) M=380VAC Electric Actuator(ON/OFF) G=220VAC Electric Actuator(Control) H=24VDC Electric Actuator(Control) J=380VAC Electric Actuator(Control) K=220VAC Explosion Proof Electric Actuator(ON/OFF) N=24VDC Explosion Proof Electric Actuator(ON/OFF) Q=380VAC Explosion Proof Electric Actuator(ON/OFF) R=220VAC Explosion Proof Electric Actuator(Control) T=24VDC Explosion Proof Electric Actuator(Control) V=380VAC Explosion Proof Electric Actuator(Control) 0=NONE	2=WCB 4=CF8 6=CF8M

**Type of valves**

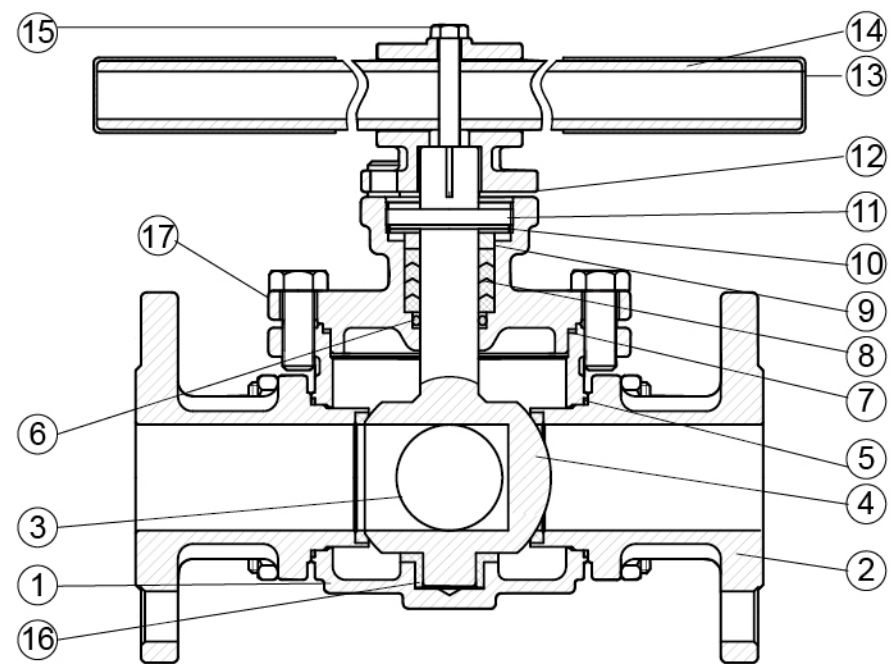


**Pressure-Temperature-Diagram**



E. Trim	F. Seal	G. Packing	H. Pressure	I. Connection	J. Valve size
4=304SS 6=316SS	K=PEEK P=PTFE R=RPTFE T=TFM	P=PTFE R=RPTFE	B=PN16/150LB C=PN25 D=PN40/300LB	A=ASME FLANGE C=GB FLANGE D=DIN FLANGE	13=1/2" (DN15) 19=2 1/2" (DN65) 14=3/4" (DN20) 20=3" (DN80) 15=1" (DN25) 21=4" (DN100) 16=1 1/4" (DN32) 22=5" (DN125) 17=1 1/2" (DN40) 23=6" (DN150) 18=2" (DN50)

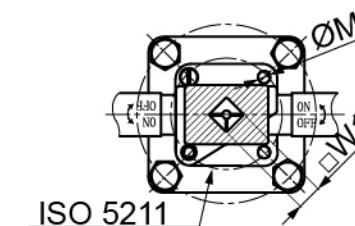
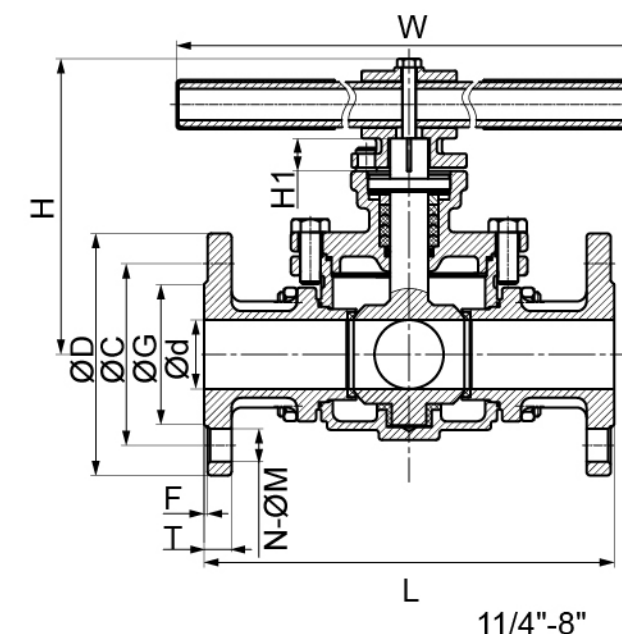
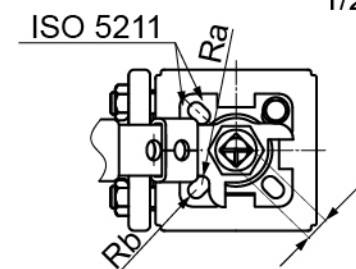
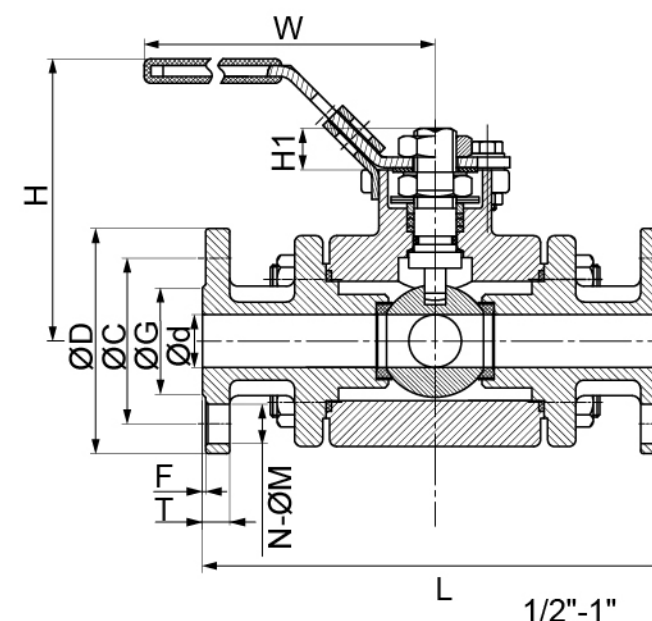
Parts list



NO.	Description	Material
1	Body	WCB
		CF8
		CF8M
2	Cap	WCB
		CF8
		CF8M
3	Ball	304
		316
4	Seat	R-PTFE
		TFM
		PTFE
5	Gasket	R-PTFE
		TFM
		PTFE
6	O-ring	VITON
		R-PTFE
		PTFE
7	Gasket	PTFE
		PEEK
		R-PTFE
8	Packing	R-PTFE
		PTFE
		PEEK
9	Sleeve	304
10	Spring washer	304
11	Cap	CF8
		CF8M
		WCB
12	Handle head	CF8
		CF8M
		WCB
13	Plastic cover	Plastic
14	Handle pole	SS
15	Handle bolt	304
16	Sleeve	R-PTFE
		PTFE
		PEEK

Dimension

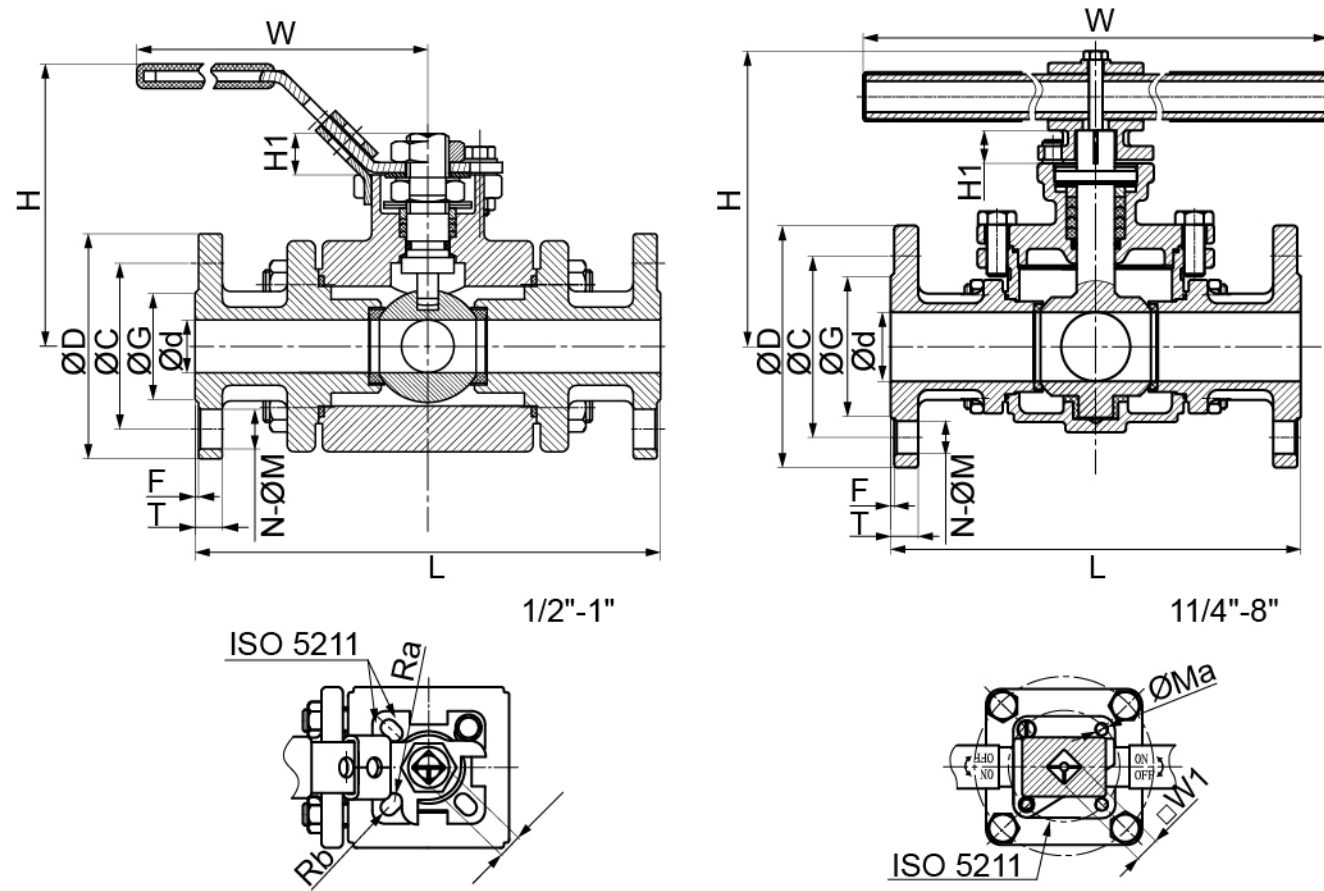
GB FLANGE



SIZE	DN	Ød	f	L	H	ISO5211	E	H1	W1	Ra	Rb	Ma	PN16							PN25/PN40							PN25		PN40	
													D	C	G	T	N	M	W	D	C	G	T	N	M	W	W	W		
1/2"	15	15	2	160	80	F03-F04	36-42	9	9	R3	R3	-	95	65	45	16	4	14	123	95	65	45	16	4	14	123	123	123		
3/4"	20	20	2	165	84	F03-F04	36-42	9	9	R3	R3	-	105	75	58	18	4	14	123	105	75	58	18	4	14	123	123	123		
1"	25	25	2	180	96	F04-F05	42-50	11	11	R3	R3.5	-	115	85	68	18	4	14	153	115	85	68	18	4	14	153	153	153		
1 1/4"	32	32	3	234	171	F07	70	19	17	-	-	Ø10	140	100	78	18	4	18	403	140	100	78	18	4	18	403	403	403		
1 1/2"	40	40	3	234	171	F07	70	19	17	-	-	Ø10	150	110	88	18	4	18	403	150	110	88	18	4	18	403	403	403		
2"	50	50	3	273	176	F07	70	19	17	-	-	Ø10	165	125	102	20	4	18	403	165	125	102	20	4	18	403	403	403		
2 1/2"	65	65	3	300	208	F10	102	24	22	-	-	Ø12	185	145	122	18	4	18	504	185	145	122	22	8	18	504	504	504		
3"	80	76	3	305	216	F10	102	24	22	-	-	Ø12	200	160	138	20	8	18	504	200	160	138	24	8	18	504	504	504		
4"	100	96	3	369	236	F10	102	24	22	-	-	Ø12	220	180	158	20	8	18	504	235	190	168	24	8	22	654	504	504		
6"	150	148	3	480	329	F14	140	38	36	-	-	Ø18	285	240	212	22	8	22	800	300	250	218	28	8	26	800	800	800		

## Dimension

### ASME FLANGE



## A220/221 3-Way pneumatic flange ball valve

**Aisenberg®**

### Specification

#### DESIGN

3-way ball valve  
Reduced bore. "L" or "T" type.  
Bi-directional seal.  
Maintenance free  
Top flange ISO5211.

#### OPERATION

Pneumatic double-acting or single-acting

#### CONNECTION

DIN 2633 ASME B16.5 GB/T 9113  
HG/T 20592

#### NOMINAL PRESSURE

PN16/PN25/PN40  
150LB/300LB

#### TEMPERATURE RANGE

PTFE: -30°C - +120°C  
R-PTFE: -30°C - +150°C  
PEEK: -30°C - +200°C  
TFM4215: -45°C - +220°C

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

#### MATERIALS

Body: WCB  
CF8  
CF8M

Ball: 304SS  
316SS

Seat: PTFE/R-PTFE/PEEK/TFM4215

Packing: PTFE/R-PTFE/PEEK/TFM4215

#### Actuator

Body: Aluminum alloy, Others on request

Cap: Polyurethane coating

#### EXTERNAL TEMPERATURE RANGE

-20°C - +80°C

#### PILOT MEDIA

Filtered gases (oil, ash and water removal)

#### OPTIONS

3/2-ways or 5/2-ways valve, limit switch, positioner, filter reducer, manual clutch



Type:  
A220/221

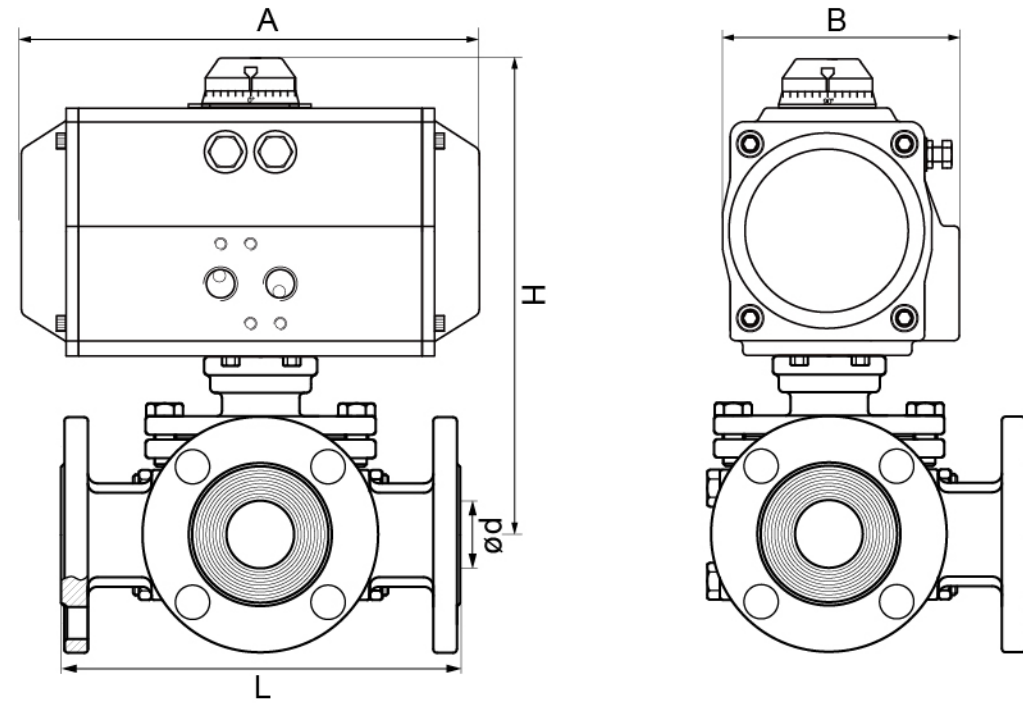
3-Way pneumatic flange  
ball valve  
Full bore  
PN16/PN25/PN40  
150LB/300LB

WCB  
CF8  
CF8M

SIZE	DN	Ød	G	f	W	ISO5211	E	H1	W1	Ra	Rb	Ma	150LB						300LB							
													D	C	T	N	M	L	H	D	C	T	N	M	L	H
1/2"	15	15	35	1.6	123	F03-F04	36-42	9	9	R3	R3	-	89	60.5	11	4	16	148	80	95	66.5	14.3	4	16	160	80
3/4"	20	20	43	1.6	123	F03-F04	36-42	9	9	R3	R3	-	98	70	11	4	16	153	84	117	82.5	15.9	4	19	165	84
1"	25	25	51	1.6	153	F04-F05	42-50	11	11	R3	R3.5	-	108	79.5	11	4	16	168	96	124	89	17.5	4	19	180	96
1 1/4"	32	32	64	1.6	403	F07	70	19	17	-	-	Ø10	-	-	-	-	-	171	133	98.5	19.1	4	19	221	171	
1 1/2"	40	40	73	1.6	403	F07	70	19	17	-	-	Ø10	127	98.5	14	4	16	221	171	156	115	20.7	4	22	234	171
2"	50	50	92	1.6	403	F07	70	19	17	-	-	Ø10	152	120.5	16	4	19	254	176	165	127	22.3	8	19	254	176
2 1/2"	65	65	105	1.6	504	F10	102	24	22	-	-	Ø12	178	139.5	18	4	19	300	208	190	149	25.4	8	22	300	198
3"	80	76	127	1.6	504	F10	102	24	22	-	-	Ø12	190	152.5	19	4	19	305	216	210	168	28.6	8	22	305	216
4"	100	96	157	1.6	504	F10	102	24	22	-	-	Ø12	229	190.5	24	8	19	369	236	254	200	31.8	8	22	369	236
6"	150	148	216	1.6	800	F14	140	38	36	-	-	Ø18	279	241.5	25	8	22	480	329	318	270	36.6	12	22	498	329

Dimension

PN16/150LB

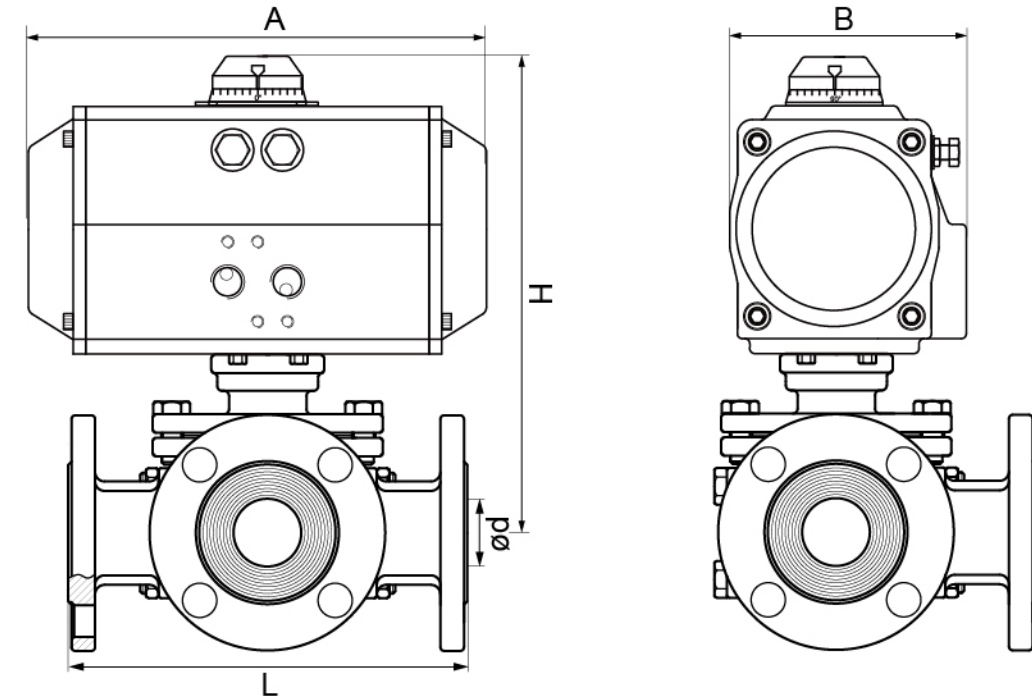


SIZE	DN	d	R-PTFE			Other			L			
			Actuator Model	A	B	H	Actuator Model	A	B	H	GB	ASME
1/2"	15	15	DA63	166	83	189	DA63	166	83	189	160	148
			SR83	204	103	210	SR83	204	103	210		
3/4"	20	20	DA63	166	83	193	DA75	184	95	205	165	153
			Ø83	204	103	214	SR83	204	103	214		
1"	25	25	DA75	184	95	215	DA83	204	103	224	180	168
			Ø92	262	109	232	SR92	262	109	232		
1 1/4"	32	32	DA83	204	103	291	DA83	204	103	291	234	-
			Ø105	268	121	315	SR105	268	121	315		
1 1/2"	40	40	DA83	204	103	291	DA92	262	109	299	234	-
			Ø105	268	121	315	SR125	301	143	337		
2"	50	50	DA92	262	109	304	DA92	262	109	304	273	254
			Ø125	301	143	342	SR125	301	143	342		
2 1/2"	65	65	DA105	268	121	347	DA105	268	121	347	300	300
			Ø140	394	152	387	SR140	394	152	387		
3"	80	76	DA125	301	143	377	DA125	301	143	377	305	305
			Ø140	394	152	395	SR140	394	152	395		
4"	100	96	DA125	301	143	397	DA125	301	143	397	369	369
			Ø160	458	174	440	SR160	458	174	440		
6"	150	148	DA140	394	152	494	DA140	394	152	494	480	480
			Ø190	528	206	553	SR190	528	206	553		

Dimension

PN25/PN40/300LB

**Aisenberg®**



SIZE	DN	d	R-PTFE			Other			L			
			Actuator Model	A	B	H	Actuator Model	A	B	H	GB	ASME
1/2"	15	15	DA75	184	95	191	DA75	184	95	191	160	160
			SR92	262	109	208	SR92	262	109	208		
3/4"	20	20	DA75	184	95	195	DA75	184	95	195	165	165
			SR92	262	109	212	SR92	262	109	212		
1"	25	25	DA83	204	103	214	DA83	204	103	214	180	180
			SR105	268	121	238	SR105	268	121	238		
1 1/4"	32	32	DA92	262	109	289	DA92	262	109	289	234	221
			SR105	268	121	305	SR105	268	121	305		
1 1/2"	40	40	DA92	262	109	289	DA92	262	109	289	234	234
			SR125	301	143	327	SR125	301	143	327		
2"	50	50	DA105	268	121	310	DA105	268	121	310	273	254
			SR140	394	152	350	SR140	394	152	350		
2 1/2"	65	65	DA125	301	143	359	DA125	301	143	359	300	300
			SR140	394	152	377	SR140	394	152	377		
3"	80	76	DA125	301	143	367	DA125	301	143	367	305	305
			SR160	458	174	410	SR160	458	174	410		
4"	100	96	DA140	394	152	405	DA140	394	152	405	369	369
			SR160	458	174	430	SR190	528	206	474		
6"	150	148	DA160	458	174	509	DA160	458	174	509	480	498
			SR210	532	226	578	SR210	532	226	578		

# A220/221 3-Way pneumatic flange ball valve

# Aisenberg®

# Aisenberg®

## Specification

### DESIGN

3-way ball valve  
Reduced bore. "L" or "T" type.  
Bi-directional seal.  
Maintenance free  
Top flange ISO5211.

### OPERATION

Electric and Handle operation

### CONNECTION

DIN 2633 ASME B16.5 GB/T 9113  
HG/T 20592

### NOMINAL PRESSURE

PN16/PN25/PN40  
150LB/300LB

### TEMPERATURE RANGE

PTFE: -30°C - +120°C  
R-PTFE: -30°C - +150°C  
PEEK: -30°C - +200°C  
TFM4215: -45°C - +220°C

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

### MATERIALS

Body: WCB  
CF8  
CF8M

Ball: 304SS  
316SS

Seat: PTFE/R-PTFE/PEEK/TFM4215

Packing: PTFE/R-PTFE/PEEK/TFM4215

### Actuator

Body: Aluminum alloy, others on request  
Cap: Polyurethane coating

### EXTERNAL TEMPERATURE RANGE

-20°C - +60°C

### OPTIONAL VOLTAGE

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

### PROTECTION

IP 67

### STANDARD EQUIPMENT

additional limit switches, optical position  
indicator, manual override

### OPTIONS

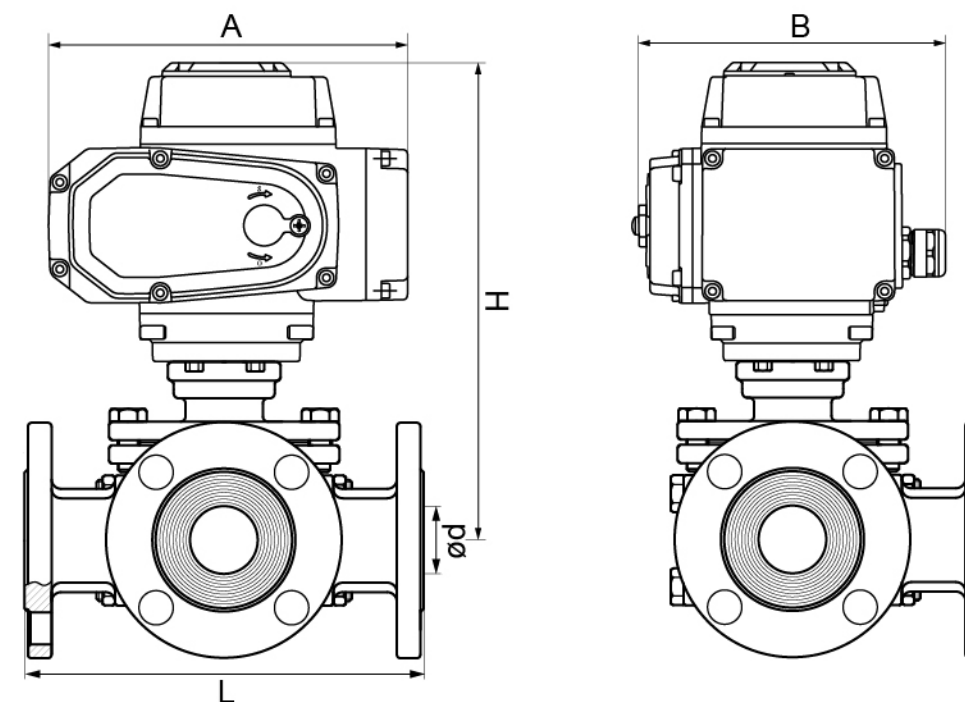
Dehumidification heater  
Overtorque protection  
Modulate type 4-20mA  
Exd IIB T4  
For more requests please contact us



Type:  
A220/221  
3-Way electric flange ball  
valve  
Full bore  
PN16/PN25/PN40  
150LB/300LB  
WCB  
CF8  
CF8M

## Dimension

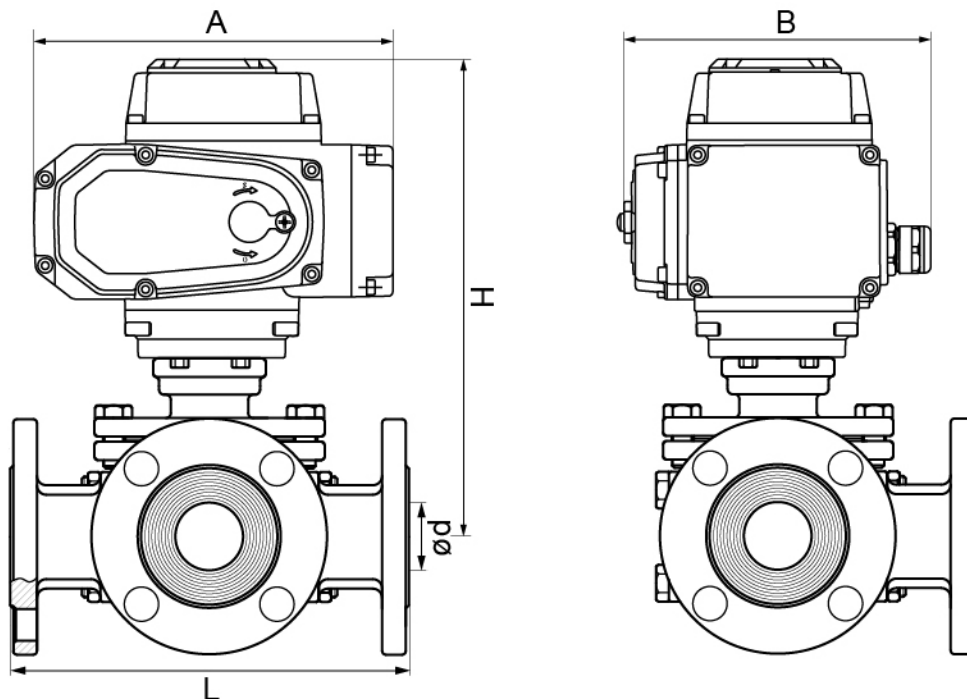
PN16/150LB



SIZE	DN	d	R-PTFE			Other			L			
			Actuator Model	A	B	H	Actuator Model	A	B	H	GB	ASME
15	1/2"	15	HB50	165	140.5	208.5	HB50	165	140.5	208.5	160	148
			HBX50	170.5	120.5	221	HBX50	170.5	120.5	221		
20	3/4"	20	HB50	165	140.5	212.5	HB50	165	140.5	212.5	165	153
			HBX50	170.5	120.5	225	HBX50	170.5	120.5	225		
25	1"	25	HB50	165	140.5	222.5	HB100	165	140.5	253.5	180	168
			HBX50	170.5	120.5	235	HBX100	170.5	120.5	267		
32	1 1/4"	32	HB100	211.5	154	320.5	HB100	211.5	154	320.5	234	-
			HBX100	217.5	139	334	HBX100	217.5	139	334		
40	1 1/2"	40	HB100	211.5	154	320.5	HB100	211.5	154	320.5	234	221
			HBX100	217.5	139	334	HBX100	217.5	139	334		
50	2"	50	HB100	211.5	154	325.5	HB200	259	186	360	273	254
			HBX100	217.5	139	339	HBX200	217.5	139	339		
65	2 1/2"	65	HB200	259	186	387	HB200	259	186	387	300	300
			HBX200	217.5	139	366	HBX200	217.5	139	366		
80	3"	76	HB200	259	186	395	HB400	259	186	395	305	305
			HBX200	217.5	139	374	HBX400	266.5	170	405		
100	4"	96	HB400	259	186	415	HB400	259	186	415	369	369
			HBX400	266.5	170	425	HBX400	266.5	170	425		
150	6"	148	HB400	259	186	494	HB600	259	186	494	480	480
			HBX400	266.5	170	504	HBX600	266.5	170	504		

## Dimension

PN25/PN40/300LB



SIZE	DN	d	R-PTFE			Other			L			
			Actuator Model	A	B	H	Actuator Model	A	B	H	GB	ASME
15	1/2"	15	HB50	165	140.5	208.5	HB50	165	140.5	208.5	160	160
			HBX50	170.5	120.5	221	HBX50	170.5	120.5	221		
20	3/4"	20	HB50	165	140.5	212.5	HB50	165	140.5	212.5	165	165
			HBX50	170.5	120.5	225	HBX50	170.5	120.5	225		
25	1"	25	HB100	211.5	154	253.5	HB100	165	140.5	253.5	180	180
			HBX100	217.5	139	267	HBX100	170.5	120.5	267		
32	1 1/4"	32	HB100	211.5	154	320.5	HB100	211.5	154	320.5	234	221
			HBX100	217.5	139	334	HBX100	217.5	139	334		
40	1 1/2"	40	HB100	211.5	154	320.5	HB100	211.5	154	320.5	234	234
			HBX100	217.5	139	334	HBX100	217.5	139	334		
50	2"	50	HB200	259	186	360	HB200	259	186	360	273	254
			HBX200	217.5	139	339	HBX200	217.5	139	339		
65	2 1/2"	65	HB200	259	186	387	HB400	259	186	387	300	300
			HBX200	217.5	139	366	HBX400	217.5	139	397		
80	3"	76	HB400	259	186	395	HB400	259	186	395	305	305
			HBX400	266.5	170	405	HBX400	266.5	170	405		
100	4"	96	HB400	259	186	415	HB400	259	186	415	369	369
			HBX400	266.5	170	425	HBX400	266.5	170	425		
150	6"	148	HB600	259	186	494	HB600	259	186	494	480	498
			HBX600	266.5	170	504	HBX600	266.5	170	504		