

## Specification

### DESIGN

The valve body consists of three parts, full bore

### OPERATION

Rotation of the handle through 90°

### CONNECTION

G/NPT female thread, Socket weld 1/4"-4"  
 DIN259, DIN2999, ISO228  
 Butt weld 1/4"-4" DIN2463, ISO1127, ANSI B36.19

### PRESSURE RANGE

1000PSI/2000PSI  
 (Please refer to manual pressure-temperature chart)

### NOMINAL PRESSURE

1000PSI/2000PSI

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

### TEMPERATURE RANGE

PTFE: -30°C - +180°C  
 S-PTFE: -30°C - +200°C  
 R-PTFE: -30°C - +200°C

### MATERIALS

Body: WCB  
 CF8  
 CF8M

Ball: CF8  
 CF8M

Ball seal: PTFE/S-PTFE/R-PTFE

Valve stem seal: PTFE/S-PTFE/R-PTFE

Handle: SS

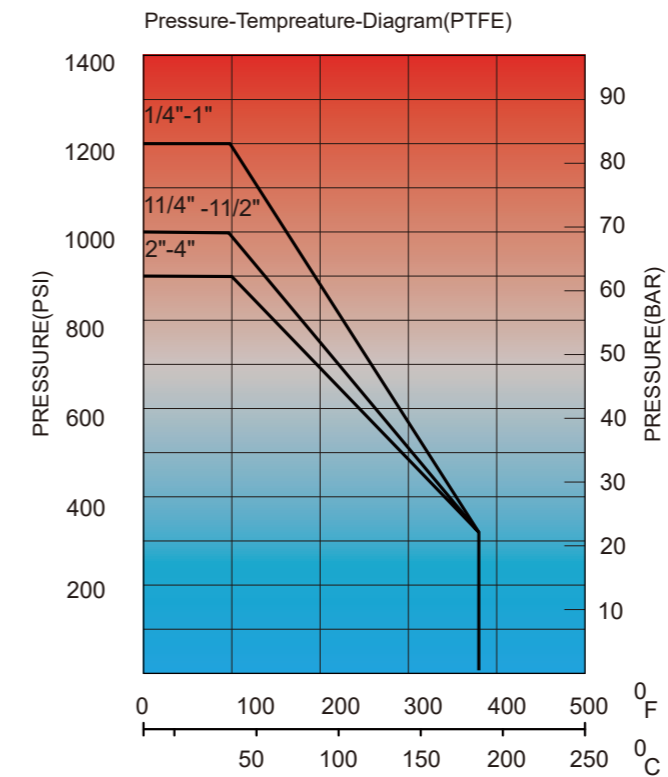


Type:  
 AAA

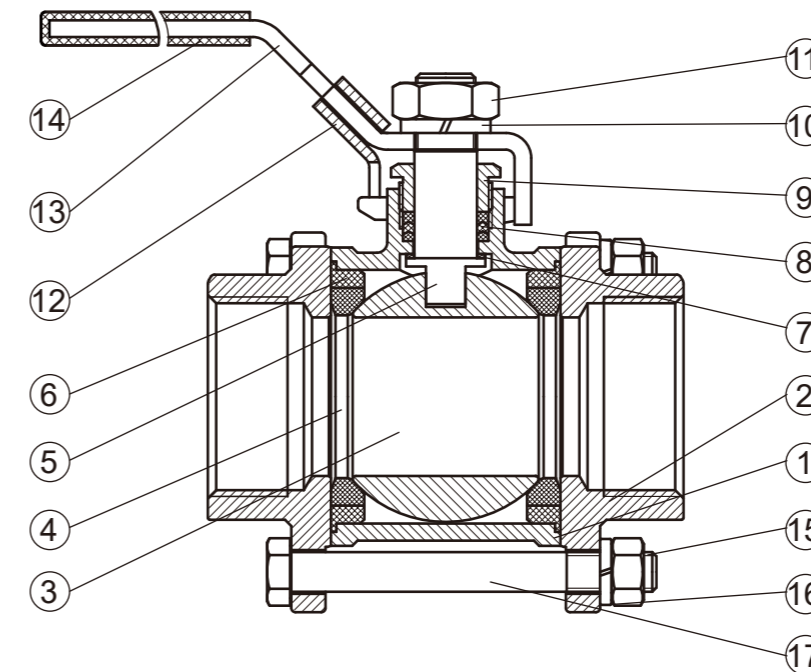
Handle 3-piece ball valve  
 Full bore  
 1000PSI/2000PSI

WCB  
 CF8  
 CF8M

## Pressure - Temperature-Diagram



## Parts list



No.	Description	Material
1	Body	WCB CF8 CF8M
2	Cap	WCB CF8 CF8M
3	Ball	304 316
4	Seat	PTFE S-PTFE R-PTFE
5	Stem	316
6	Gasket	PTFE S-PTFE PEEK
7	Thrust Washer	PTFE S-PTFE PEEK
8	Packing	PTFE S-PTFE PEEK
9	Gland	CF8
10	Spring Washer	304
11	Stem Nut	304
12	Locking Device	304
13	Handle	SS
14	Plastic Cover	Plastic
15	Joint Nut	304
16	Spring Washer	304
17	Joint Bolt	304

Ordering example: e.g. AAA232E118

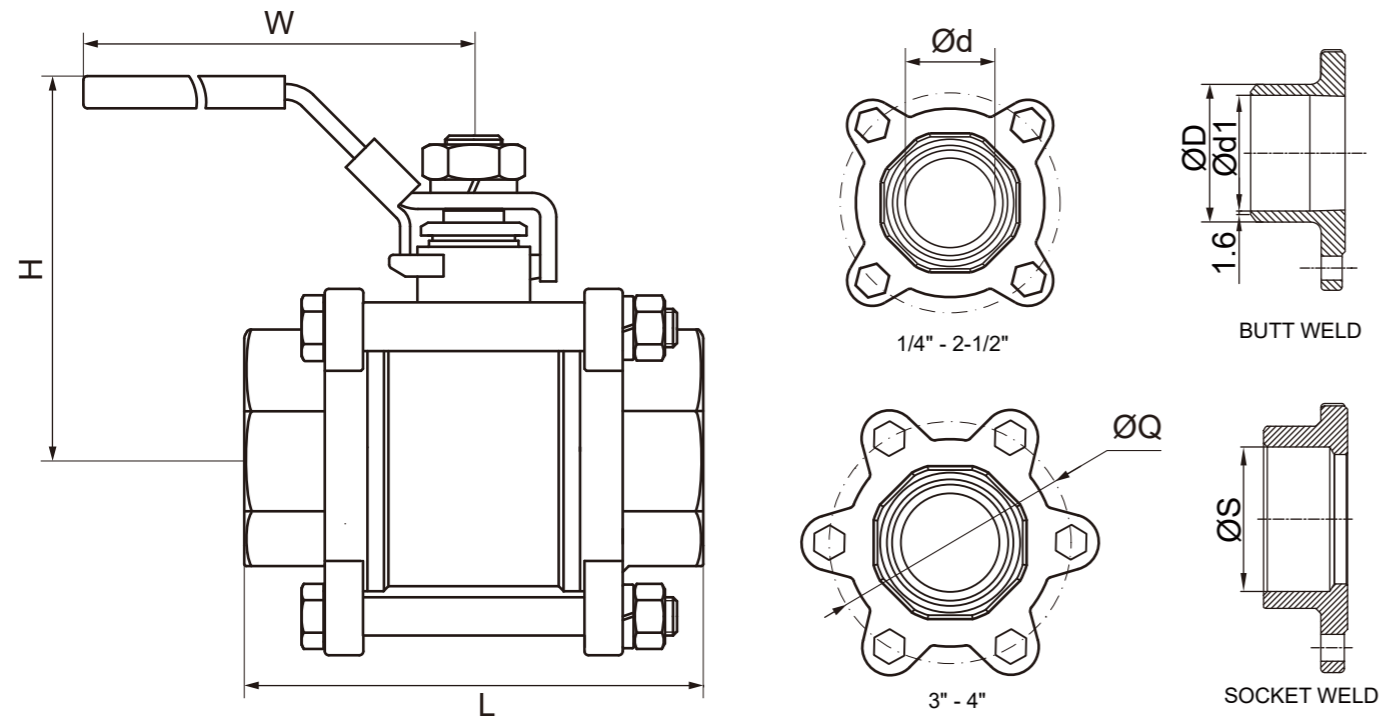
= 3-piece manual ball valve, WCB/304, PTFE, 1000 PSI, GThread, DN50

Ball valve

A . Type	B+C. Body/Trim	D. Sealing	E. Pressure	F. Connection	G + H. Size	
AAA=3-piece manual ball valve Full bore	23=WCB/304 24=WCB/316 33=CF8/304 44=CF8M/316	2=PTFE 3=R-PTFE 9=S-PTFE	E=1000PSI F=2000PSI	1=GThread 4=Socket Weld 8=NPT Thread S=Butt Weld	11=1/4" 12=3/8" 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"

## Dimension

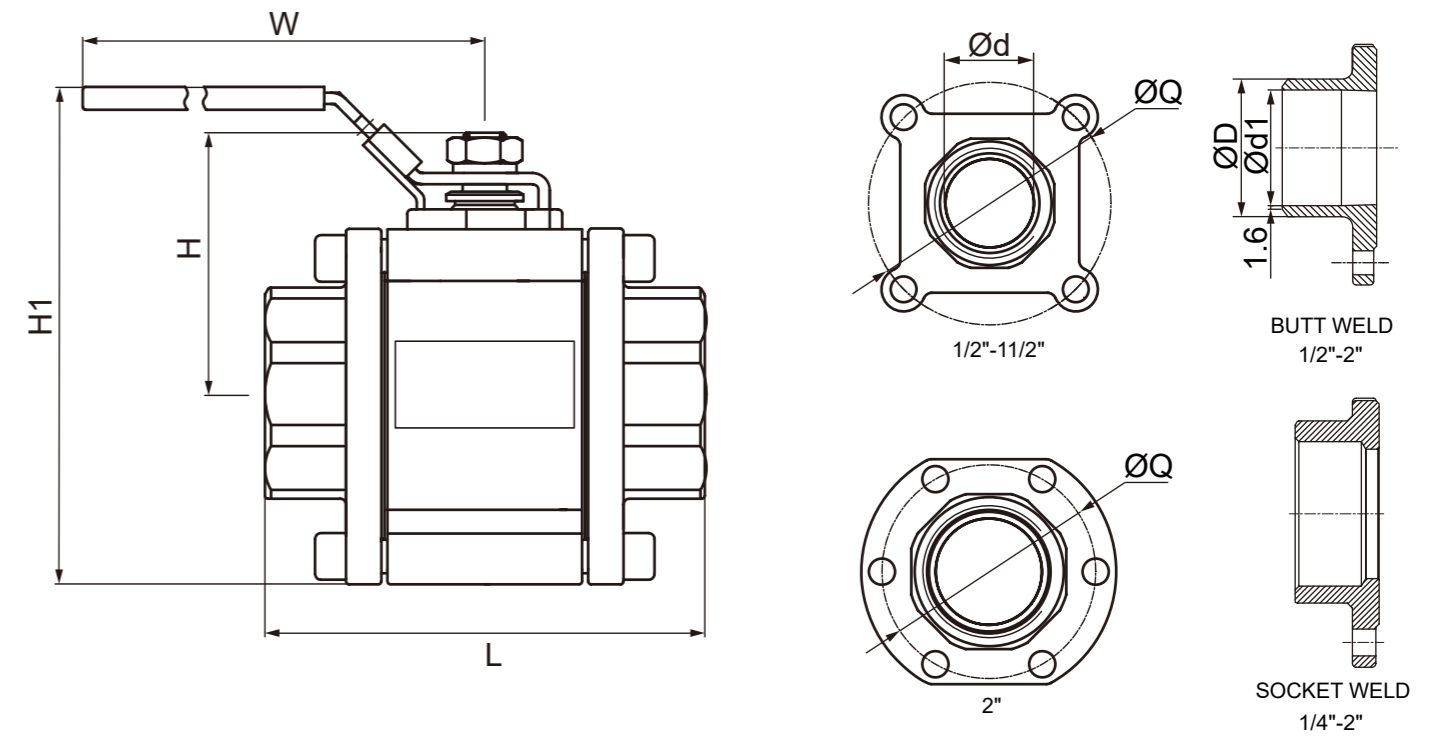
1000PSI: Socket weld/Thread/Butt weld



SIZE	DN	Ød	ØD	Ød1	ØS	L		H	W		ØQ
						SOCKET/Thread	BUTT WELD		SOCKET/Thread	BUTT WELD	
1/4"	8	11.6	17.2	10	14.1	63	70	56	123	102	40.5
3/8"	10	12.7	17.2	12.5	17.6	63	70	56	123	102	40.5
1/2"	15	15	21.3	16	21.7	63	75	65	123	123	47
3/4"	20	20	26.7	20	27.1	73	90	67	123	123	53.5
1"	25	25	33.6	25	33.8	85	100	79	153	153	59.6
1 1/4"	32	32	42.4	33.8	42.6	96	110	84	153	153	74.2
1 1/2"	40	38	48	39.5	48.7	114	125	92	183	183	84
2"	50	50	60.5	50.8	61.1	134	150	99	183	183	101
2 1/2"	65	65	76.1	62.7	76.9	180	190	136	246	246	132
3"	80	80	88.9	77.9	89.8	200	220	146	246	246	161.5
4"	100	100	114.2	100	115.5	228	270	168	395	350	191

## Dimension

2000PSI: Socket weld/Thread/Butt weld



SIZE	DN	Ød	ØD	Ød1	L	H1	H	W
						SOCKET/Thread	BUTT WELD	
1/4"	8	11.6	-	-	66	90.1	-	102
3/8"	10	12.7	-	-	66	90.1	50.3	102
1/2"	15	15	21.3	16	72	97.4	50.3	123
3/4"	20	20	26.9	20	94.5	104.8	55	123
1"	25	25	33.7	25	107	120.7	67.5	153
1 1/4"	32	32	42.4	33.8	116	130.1	74	153
1 1/2"	40	38	48.3	39.5	127	143.9	80	183
2"	50	50	60.3	50.8	141	177.5	98.5	183

### Specification

#### DESIGN

The valve body consists of three parts, full bore, Top flange ISO 5211

#### OPERATION

Rotation of the handle through 90°

#### CONNECTION

G/NPT female thread, Socket weld 1/4" - 4"  
DIN259, DIN2999, ISO228  
Butt weld 1/4"-4" DIN2463, ISO1127, ANSI B36.19

#### PRESSURE RANGE

1000PSI/2000PSI  
(Please refer to manual pressure-temperature chart)

#### NOMINAL PRESSURE

1000PSI/2000PSI

#### TEMPERATURE RANGE

PTFE: -30°C - +180°C  
S-PTFE: -30°C - +200°C  
R-PTFE: -30°C - +200°C

#### MATERIALS

Body: WCB  
CF8  
CF8M

Ball: 304  
316

Ball seal: PTFE/S-PTFE/R-PTFE

Valve stem seal: PTFE/S-PTFE/R-PTFE

Handle: SS

#### OPTIONS

Electrical position indicator  
Handle  
Handwheel device

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

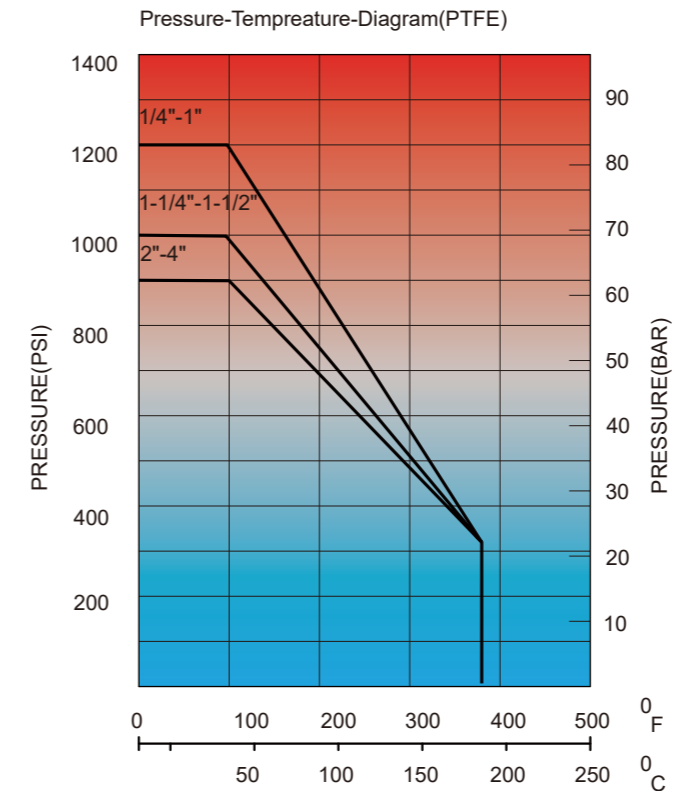


Type:  
ABA

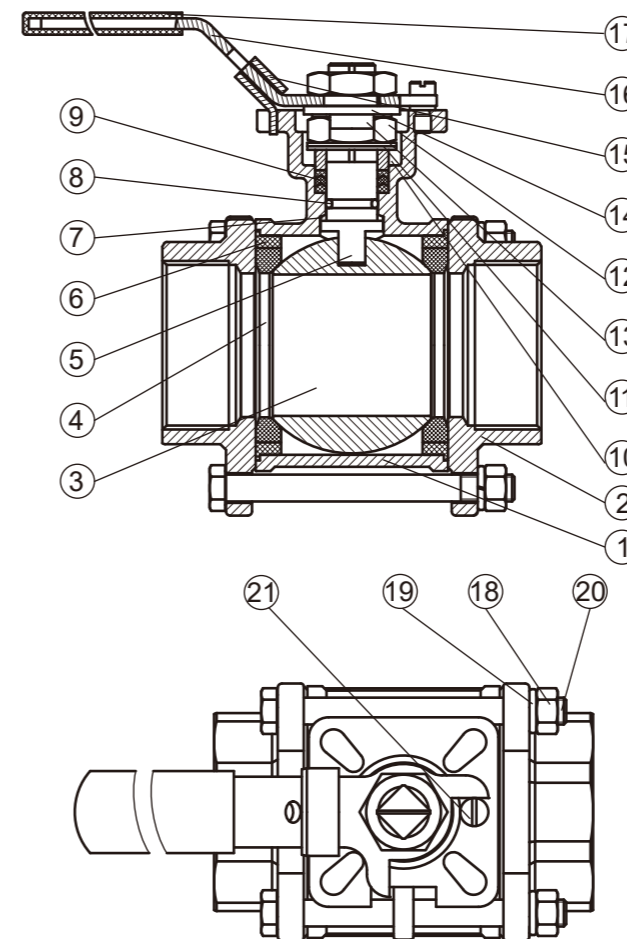
ISO5211 three piece ball valve  
Full bore  
1000PSI/2000PSI

WCB  
CF8  
CF8M

### Pressure - Temperature-Diagram



### Parts list



No.	Description	Material
1	Body	WCB
		CF8
		CF8M
2	Cap	WCB
		CF8
3	Ball	304
		316
4	Seat	PTFE
		S-PTFE
		R-PTFE
5	Stem	304
6	Gasket	PTFE
		S-PTFE
		PEEK
7	Thrust Washer	R-PTFE
8	O-Ring	VITON
9	Packing	PTFE
		S-PTFE
		PEEK
10	Gland	304
11	Spring Washer	304
12	Stem Nut	304
13	Stop Washer	304
14	Handle Washer	304
15	Locking Device	304
16	Handle	SS
17	Plastic Cover	Plastic
18	Hex Nut	304
19	Bolt Washer	304
20	Joint Bolt	304
21	Stop Pin	304

Ordering example: e.g. ABA232E118

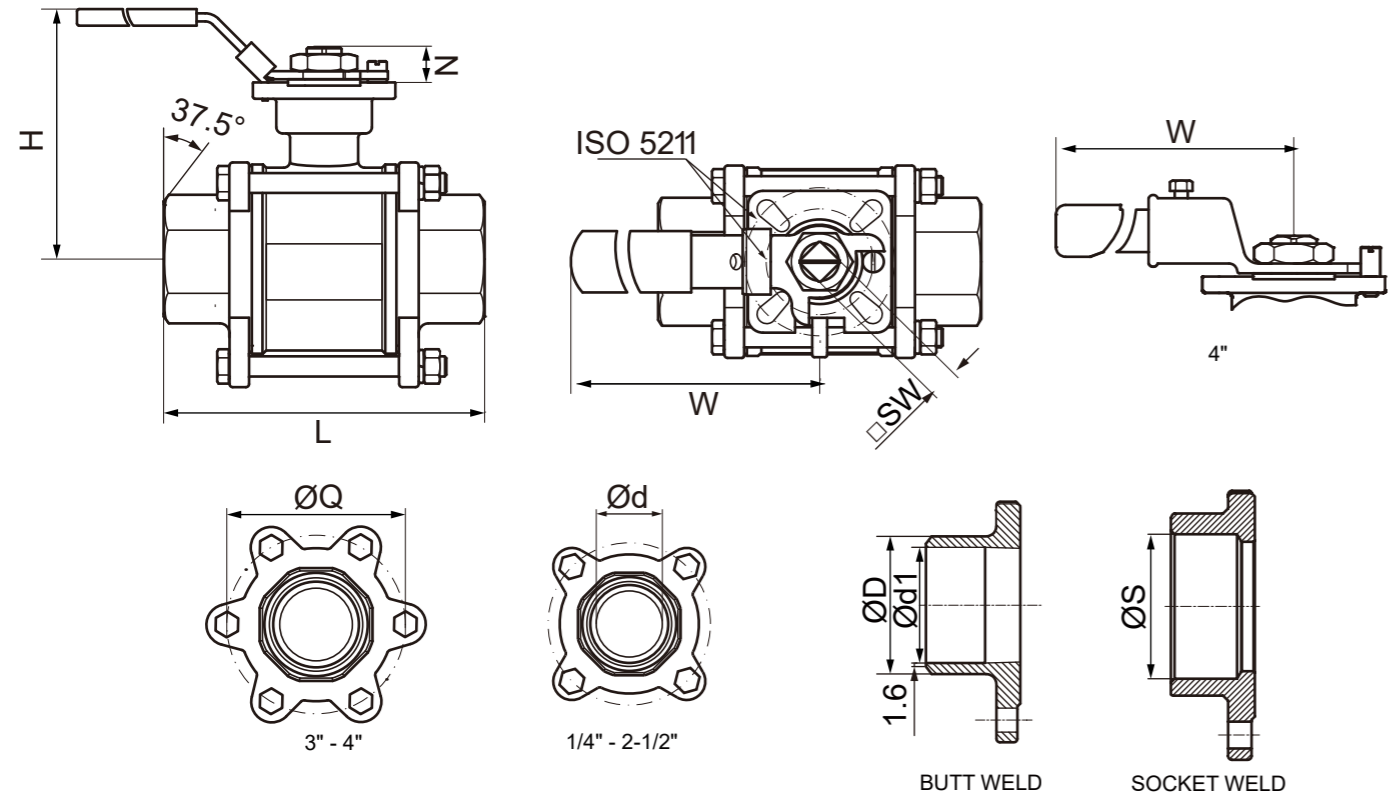
= ISO5211 manual three piece threaded ball valve, WCB/CF8, PTFE, 1000 PSI, GThread, DN50

Ball valve

A. Type	B+C. Body/Trim	D. Sealing	E. Standard pressure	F. Connection	G + H. Size	
ABA=ISO5211 manual three piece threaded ball valve	23=WCB/304	2=PTFE	E=1000 PSI	1=GThread	11=1/4"	19=2-1/2"
	24=WCB/316	3=R-PTFE	F=2000 PSI	4=Socket Weld	12=3/8"	20=3"
	33=CF8/304	9=S-PTFE		8=NPT Thread	13=1/2"	21=4"
	44=CF8M/316			S=Butt Weld	14=3/4"	
					15=1"	
					16=1-1/4"	
					17=1-1/2"	
					18=2"	

## Dimension

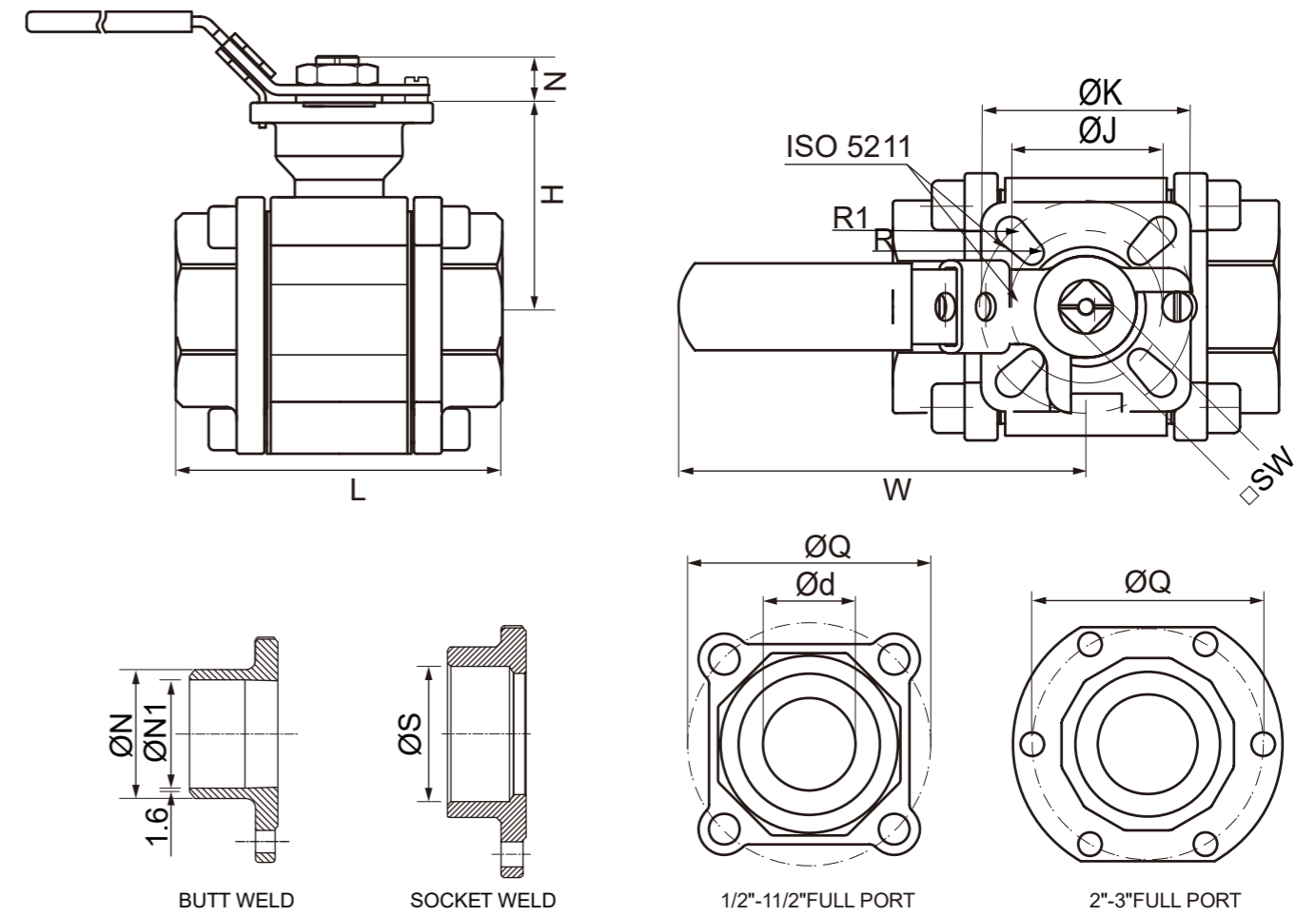
1000PSI: Socket weld/Thread/Butt weld



SIZE	DN	Ød	L		H	W	ISO5211	N	□SW	ØQ	ØD	Ød1	ØS
			Socket/Thread	Butt Weld									
1/4"	8	11.6	63	70	74	123	F03-F04	9	9	52	17.2	10	14.1
3/8"	10	12.7	63	70	74	123	F03-F04	9	9	52	17.2	12.5	17.6
1/2"	15	15	63	75	74	123	F03-F04	9	9	52	21.3	16	21.7
3/4"	20	20	73	90	78	123	F03-F04	9	9	54.5	26.7	20	27.1
1"	25	25	85	100	89	153	F04-F05	11	11	63.5	33.6	25	33.8
1 1/4"	32	32	96	110	94	153	F04-F05	11	11	74.2	42.4	33.8	42.6
1 1/2"	40	38	114	125	110	183	F05-F07	14	14	84	48	39.5	48.7
2"	50	50	134	150	118	183	F05-F07	14	14	101	60.5	50.8	61.1
2 1/2"	65	65	180	190	161	246	F07-F10	17	17	132	76.1	62.7	76.9
3"	80	80	200	220	170	246	F07-F10	17	17	161.5	88.9	77.9	89.8
4"	100	100	228	270	202	395	F10-F12	22	22	191	114.2	100	115.5

## Dimension

2000PSI: Socket weld/Thread/Butt weld



SIZE	DN	Ød	L	H	W	ISO5211	ØJ	ØK	N	□SW	R	R1	ØN	ØN1	ØS	ØQ
1/2"	15	15	71.6	41	123	F03-F04	36	42	9	9	3	3	21.7	16.8	21.7	54
3/4"	20	20	96.6	44	123	F03-F04	36	42	9	9	3	3	27.2	22	27.7	62
1"	25	25	109	59	153	F04-F05	42	50	11	11	3	3.5	34	27.6	33.8	71
1-1/4"	32	32	117	63	153	F04-F05	42	50	11	11	3	3.5	42	36.1	42.6	80.5
1-1/2"	40	38	129	82	183	F05-F07	50	70	14	14	3.75	4.5	48.6	41.9	48.7	93.5
2"	50	50.8	142	90	183	F05-F07	50	70	14	14	3.75	4.5	60.5	54.4	61.1	114
2-1/2"	65	65	174	118.5	246	F07-F10	70	102	17	17	5	6	76.1	70.9	76.9	140
3"	80	76	193	129	246	F07-F10	70	102	17	17	5	6	90	81.1	89.8	175.5

### Specification

#### DESIGN

The valve body consists of three parts, full bore  
Top flange ISO 5211

#### OPERATION

Pneumatic double-acting or single-acting

#### CONNECTION

G/NPT female thread 1/4" - 4" DIN259,  
DIN2999,ISO228

#### PRESSURE RANGE

1000PSI/2000PSI  
(please refer to the manual pressure-temperature chart)

#### NOMINAL PRESSURE

1000PSI/2000PSI

#### PILOT PRESSURE

2 - 8 bar  
(Lower pilot pressure on request)

#### TEMPERATURE RANGE

PTFE: -30°C - +180°C  
S-PTFE: -30°C - +200°C  
R-PTFE: -30°C - +200°C

#### MATERIALS

Body: WCB  
CF8  
CF8M

Ball: 304  
316

Ball seal: PTFE/S-PTFE/R-PTFE

Valve stem seal: PTFE/S-PTFE/R-PTFE

#### 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

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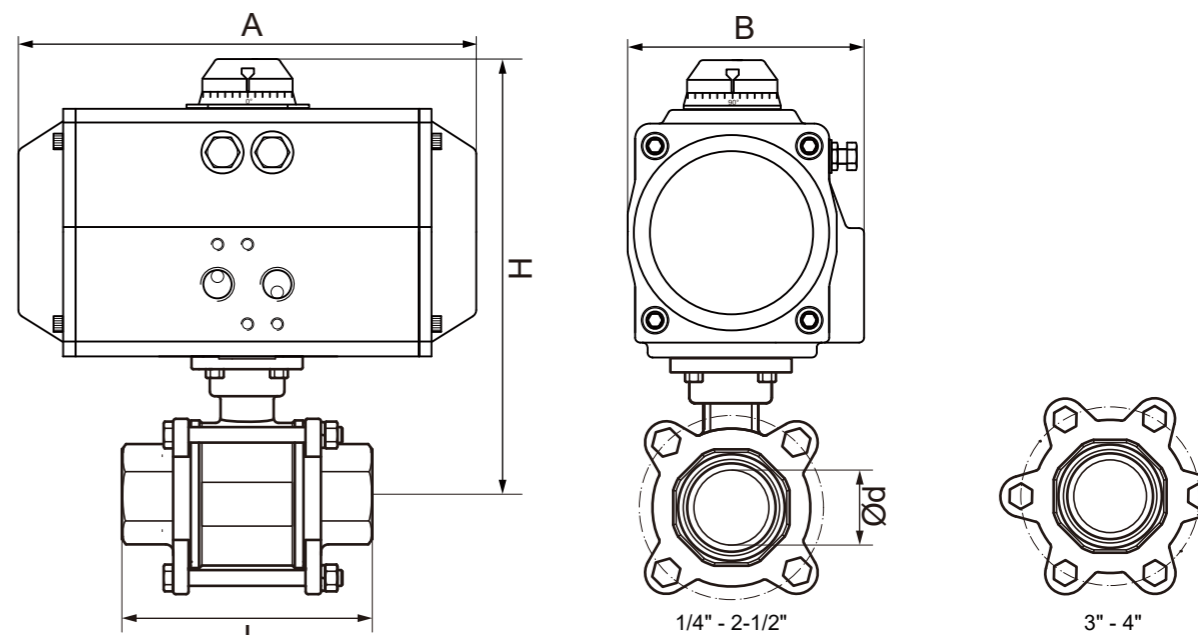
For further specifications please refer to the ball valve (ABA) and actuator (PA) data sheet



Type:  
ABA-PA  
  
Pneumatic 3-Piece ball valve  
Full bore  
1000PSI/2000PSI  
  
WCB  
CF8  
CF8M

### Dimension

1000PSI:Socket weld/Thread/Butt weld



Ordering example: e.g. ABA332E118-PA1116110

=ISO5211 Three piece thread ball valve,CF8/304 ,PTFE,GThread,1000PSI, DN50,Pneumatic actuator PA,Double action,Anodising aluminam,Piston Ø83mm,NBR,Gear0,-90°

Ball valve

A. Type	B+C. Body/Trim	D. Sealing	E. Standard pressure	F. Connection	G + H. Size	
ABA=ISO5211Three piece ball valve	23=WCB/304 24=WCB/316 33=CF8/304 44=CF8M/316	2=PTFE 3=R-PTFE 9=S-PTFE	E=1000 PSI F=2000 PSI	1=GThread 4=Socket Weld 8=NPT Thread S=Butt Weld	11=1/4" 12=3/8" 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"

Actuator

I. Type	J. Fail position	K. Material	L + M. Specifications		N. Seal	O. Structure	P. Trip
PA=Pneumatic actuator	1=Double action 2=Single action-close 3=Single action-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°

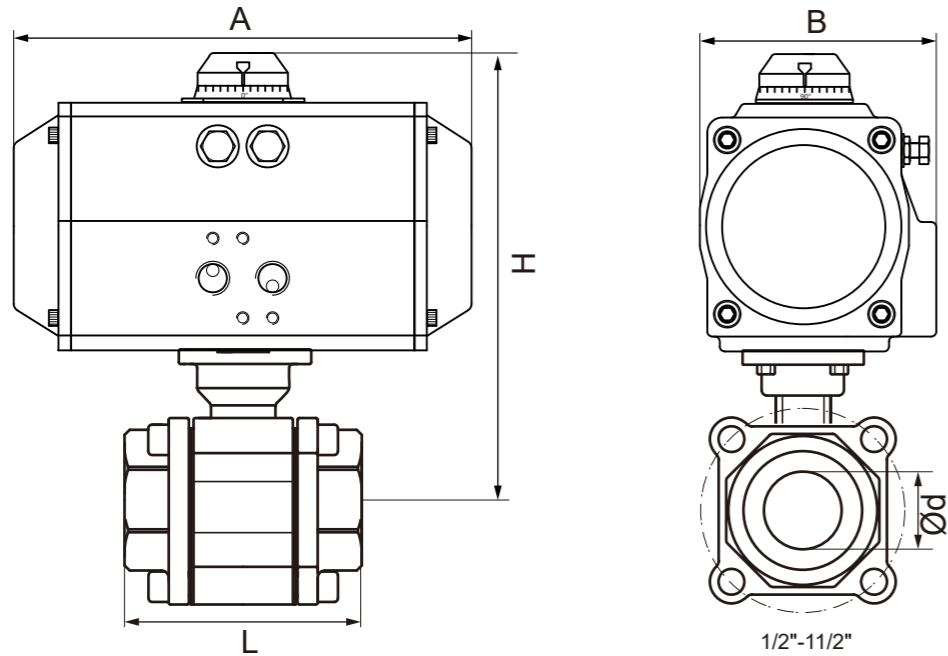
SIZE	DN	Ød	Actuator		A	B	H	L	
			Model	Specification				Socket/Thread	Butt
1/4"	8	11.6	PA1113110	Ø52	147	72	176	63	70
			PA2113110	Ø52	147	72	176		
3/8"	10	12.7	PA1113110	Ø52	147	72	176	63	70
			PA2113110	Ø52	147	72	176		
1/2"	15	15	PA1113110	Ø52	147	72	176	63	75
			PA2114110	Ø63	172	83	192		
3/4"	20	20	PA1113110	Ø52	147	72	180	73	90
			PA2114110	Ø63	172	83	196		
1"	25	25	PA1114110	Ø63	172	83	207	85	100
			PA2115110	Ø75	184	95	219		
1-1/4"	32	32	PA1115110	Ø75	184	95	224	96	110
			PA2116110	Ø83	204	103	233		
1-1/2"	40	40	PA1115110	Ø75	184	95	240	114	125
			PA2117110	Ø92	262	109	257		
2"	50	50	PA1116110	Ø83	204	103	257	134	150
			PA2117110	Ø92	262	109	265		
2-1/2"	65	65	PA1117110	Ø92	262	109	308	180	190
			PA2118110	Ø105	268	121	324		
3"	80	80	PA1118110	Ø105	268	121	333	200	220
			PA2119110	Ø125	301	143	355		
4"	100	100	PA1119110	Ø125	301	143	387	228	270
			PA2120110	Ø140	394	152	405		

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



## Dimension

2000PSI:Socket weld/Thread/Butt weld



DN	Ød	Actuator		A	B	H	L
		Model	Size				
15	15	PA1113110	Ø52	147	72	143	71.6
		PA2114110	Ø63	172	83	159	
20	20	PA1113110	Ø52	147	72	146	96.6
		PA2114110	Ø63	172	83	162	
25	25	PA1114110	Ø63	172	83	177	109
		PA2115110	Ø75	184	95	189	
32	32	PA1115110	Ø75	184	95	193	117
		PA2116110	Ø83	204	103	202	
40	40	PA1116110	Ø83	204	103	221	129
		PA2117110	Ø92	262	109	229	
50	50	PA1117110	Ø92	262	109	237	142
		PA2118110	Ø105	268	121	253	
65	65	PA1118110	Ø105	268	121	282	174
		PA2119110	Ø125	310	143	304	
80	80	PA1119110	Ø125	310	143	314	193
		PA2120110	Ø140	394	152	332	

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

## Specification

### DESIGN

The valve body consists of three parts, full bore  
Top flange ISO 5211

### OPERATION

Electric and Handle operation

### CONNECTION

G/NPT female thread/Clamp/Butt weld/Socket weld  
DIN259,DIN2999,ISO228

### PRESSURE RANGE

1000PSI/2000PSI  
(Please refer to the manual pressure-temperature chart)

### NOMINAL PRESSURE

1000PSI/2000PSI

### TEMPERATURE RANGE

PTFE: -30°C - +180°C  
S-PTFE: -30°C - +200°C  
R-PTFE: -30°C - +200°C

### MATERIALS

Body: WCB  
CF8  
CF8M

Ball: 304  
316

Ball seal: PTFE/S-PTFE/R-PTFE

Valve stem seal: PTFE/S-PTFE/R-PTFE

### 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 IIBT4

For more requests please contact us

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

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



Type:  
ABA-KL

Electric 3-piece ball valve

Full bore  
1000PSI/2000PSI

WCB  
CF8  
CF8M

## Ordering example:

e.g. ABA332E118-KL411111  
=ISO5211 Three piece ball valve, CF8/304 ,PTFE,1000 PSI,GThread,DN50,Electric actuator,220V AC,50Nm,On/off type+dry contact

### Ball valve

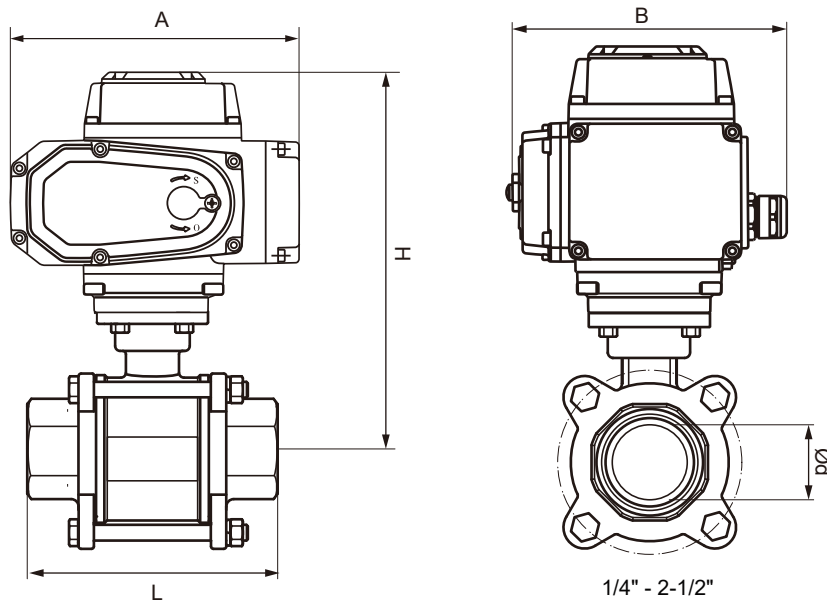
A . Type	B+C. Body/Trim	D. Sealing	E. Standard pressure	F. Connection	G + H. Size	
ABA=ISO5211Three piece ball valve	23=WCB/304 24=WCB/316 33=CF8/304 44=CF8M/316	2=PTFE 3=R-PTFE 9=S-PTFE	E=1000 PSI F=2000 PSI	1=GThread 4=Socket Weld 8=NPT Thread S=Butt Weld	11=1/4" 12=3/8" 13=1/2" 14=3/4" 15=1" 16=1-1/4" 17=1-1/2" 18=2"	19=2-1/2" 20=3" 21=4"

### Actuator

I . Type	J. Voltage	K. Explosion proof grade	L+M. Torque(NM)	N. Extra	O. Spare
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 +dry contact 2=Modulate type 4~20mA	1=No 2=1K~10K potentiometer 3=Current position sensor 4~20mA 4=Overload protection (200-2000NM) 8=Arefaction protect

## Dimension

1000PSI/2000PSI:Socket weld/Thread/Butt weld



SIZE	DN	Ød	Actuator		A	B	H	Socket/Thread	Butt
			Model	Torque(NM)				L	
1/4"	8	11.6	KL111111	50	165.0	140.5	212	63	70
			KL121111	50	170.5	121	224		
3/8"	10	12.7	KL111111	50	165.0	140.5	212	63	70
			KL121111	50	170.5	121	224		
1/2"	15	15	KL111111	50	165.0	140.5	212	63	75
			KL121111	50	170.5	121	224		
3/4"	20	20	KL111111	50	165.0	140.5	216	73	90
			KL121111	50	170.5	121	228		
1"	25	25	KL111111	50	165.0	140.5	227	85	100
			KL121111	50	170.5	121	239		
1-1/4"	32	32	KL111111	50	165.0	140.5	232	96	110
			KL121111	50	170.5	121	244		
1-1/2"	40	40	KL111111	50	165.0	140.5	248	114	125
			KL121111	50	170.5	121	260		
2"	50	50	KL111311	100	211.5	154	287	134	150
			KL121311	100	217.5	139	300		
2-1/2"	65	65	KL111311	100	211.5	154	330	180	190
			KL121311	100	217.5	139	343		
3"	80	80	KL111511	200	259.0	186	373	200	220
			KL121511	200	217.5	139	352		
4"	100	100	KL111511	200	259.0	186	405	228	270
			KL121511	200	217.5	139	384		

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