

## Direct Mount Metal Seated 2-Piece Floating Ball Valve Bi-direction

### CLASS 150, DN15~DN50

### Series MS2D

#### Features

- Special surface hardening treatment for ball and seat provides long working life, options available to suit high temperature, or abrasive fluid such as slurries and pulp stock.
- Valve ball remains in close and tight contact with spring loaded ball seat for maximum sealing effects.
- Machine-lapped ball and seat for tight contact between the two circular surfaces.
- Conforming to ANSI / FCI 70-2 Class V leakage class; Class VI optional.
- Integral twin pattern ISO 5211 direct-mounting pad.

#### Standards

- Design: ASME B16.34
- Face-to-Face: ASME B16.34
- Flange End Dimensions: ASME B16.5
- Inspection & test acc. to API598

PMA: 275 PSI@50°C

TMA: Various

Selection:

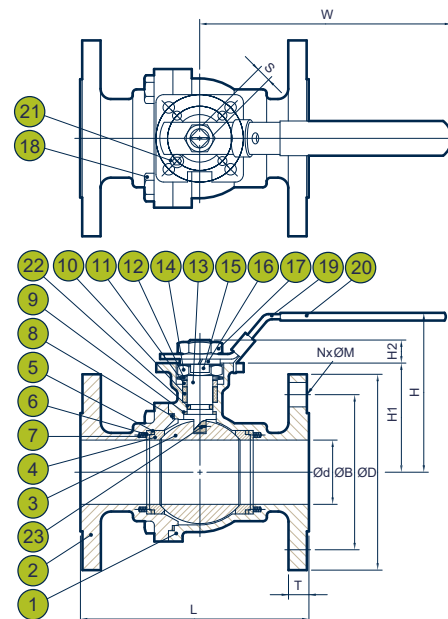
Material of Body:  
CF8M/WCB

#### Ball Treatment Option

Ball Treatment	Hardness (HRC)	Temperature (°C)	Media
Hard Chrome HCr	60	350°C	Clean
Nickel Alloy SFNi	55	450°C	Various
Tungsten Carbide TC	85	450°C	Various

Material List		
No.	PARTS NAME	MATERIALS
1	BODY	CF8M / WCB
2	CAP	CF8M / WCB
3	BALL	ASTM A276 316 ( Hardened / Coating )
4	BALL SEAT	ASTM A276 316 ( Hardened / Coating )
5	BALL SEAT GASKET	GRAPHITE
6	BALL SEAT PACKING	SS304
7	BALL SEAT SPRING	JIS G3565 SW0CV-V ASTM A276 304 ASTM B637 INCCNEL X-750
8-1	BODY SEAL	PTFE
8-2		GRAPHITE
9-1	THRUST WASHER	PTFE
9-2		GRAPHITE
10	STEM PACKING	GRAPHITE
11	GLAND	SS304
12	BELLEVILLE WASHER	DIN 17221 50CrV4
13	STEM	ASTM A276 316 ASTM A564 17-4PH
14	STEM NUT	SS304
15	LOCK SADDLE	SS304
16	HANDLE WASHER	SS304
17	HANDLE NUT	SS304
18	BODY BOLT	A2-70 / ISO 898-1 8.8
19	HANDLE	SS304 / ZINC PLATE STEEL
20	HANDLE SLEEVE	VINYL
21	STOP PIN	SS304 / CARBON STEEL
22	O-RING	VITON
23	ANTI-STATIC DEVICE	SS316

\* Enclosed is a condensed table. For complete options, contact DIE ERSTE directly.



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#### Dimensions (mm)

Size	d	L	H	W	H1	H2	D	B	T	S	N	M	ISO 5211	
														IN
1/2"	15	15	108	81	135	45	9	88.9	60.5	11.2	9	4	15.8	F03/F04
3/4"	20	20	117	86	135	55.5	9	98.6	69.9	11.2	9	4	15.8	F03/F04
1"	25	25	127	91	165	59.5	11	108	79.2	11.2	11	4	15.8	F04/F05
1 1/2"	40	38	165	110	195	76	14	127	98.2	14.3	11	4	15.8	F05/F07
2"	50	50	178	130	195	93	15	152.4	120.7	15.8	14	4	19.1	F05/F07

# Direct Mount Metal Seated 2-Piece Floating Ball Valve Bi-direction

## CLASS 150, DN65~DN100

## Series MS2D

### Features

- Special surface hardening treatment for ball and seat provides long working life, options available to suit high temperature, or abrasive fluid such as slurries and pulp stock.
- Valve ball remains in close and tight contact with spring loaded ball seat for maximum sealing effects.
- Machine-lapped ball and seat for tight contact between the two circular surfaces.
- Conforming to ANSI / FCI 70-2 Class V leakage class; Class VI optional.
- Integral twin pattern ISO 5211 direct-mounting pad.

### Standards

- Design: ASME B16.34
- Face-to-Face: ASME B16.34
- Flange End Dimensions: ASME B16.5
- Inspection & test acc. to API598

PMA: 275 PSI@50°C

TMA: Various

Selection:

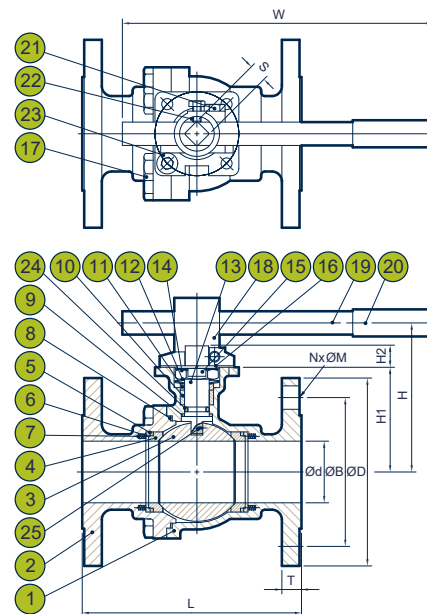
Material of Body:  
CF8M/WCB

Ball Treatment Option			
Ball Treatment	Hardness (HRC)	Temperature (°C)	Media
Hard Chrome HCr	60	350°C	Clean
Nickel Alloy SFNi	55	450°C	Various
Tungsten Carbide TC	85	450°C	Various

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Material List		
No.	PARTS NAME	MATERIALS
1	BODY	CF8M / WCB
2	CAP	CF8M / WCB
3	BALL	ASTM A276 316 ( Hardened / Coating )
4	BALL SEAT	ASTM A276 316 ( Hardened / Coating )
5	BALL SEAT GASKET	GRAPHITE
6	BALL SEAT PACKING	ASTM A164 304
7	BALL SEAT SPRING	JIS G3565 SWOCV-V ASTM A276 304 ASTM B637 INCCNEL X-750
8-1	BODY SEAL	PTFE
8-2		GRAPHITE
9-1	THRUST WASHER	PTFE
9-2		GRAPHITE
10	STEM PACKING	GRAPHITE
11	GLAND	SS304
12	BELLEVILLE WASHER	DIN 17221 50CrV4
13	STEM	ASTM A276 316 ASTM A564 17-4PH
14	STEM NUT	SS304
15	LOCK SADDLE	SS304
16	HANDLE WASHER	SS304
17	BODY BOLT	A2-70 / ISO 898-1 8.8
18	HANDLE ADAPTER	CF8 / WCB
19	HANDLE STEEL PIPE	SS304 / CARBON STEEL
20	HANDLE SLEEVE	VINYL
21	HANDLE BOLT	SS304 / CARBON STEEL
22	HANDLE BOLT	SS304 / CARBON STEEL
23	STOP PIN	SS304 / CARBON STEEL
24	O-RING	VITON
25	ANTI-STATIC DEVICE	SS316

\* Enclosed is a condensed table. For complete options, contact DIE ERSTE directly.



### Dimensions (mm)

Size	IN	DN	d	L	H	W	H1	H2	D	B	T	S	N	M	ISO 5211
3"	80	80	203	190	460	127	19	190.5	152.4	19.1	17	4	19.1	F07/F10	
4"	100	100	229	235	460	158	24	228.6	190.5	23.9	22	8	19.1	F10/F12	

## Direct Mount Metal Seated 2-Piece Floating Ball Valve Uni-direction

### CLASS 150, DN15~DN100

### Series MS2D

#### Features

- Special surface hardening treatment for ball and seat provides long working life, options available to suit high temperature, or abrasive fluid such as slurries and pulp stock.
- Valve ball remains in close and tight contact with spring loaded ball seat for maximum sealing effects.
- Machine-lapped ball and seat for tight contact between the two circular surfaces.
- Conforming to ANSI / FCI 70-2 Class V leakage class; Class VI optional.
- Integral twin pattern ISO 5211 direct-mounting pad.

#### Standards

- Design: ASME B16.34
- Face-to-Face: ASME B16.10
- Flange End Dimensions: ASME B16.5
- Inspection & test acc. to API598

PMA: 275 PSI@50°C

TMA: Various

Selection:

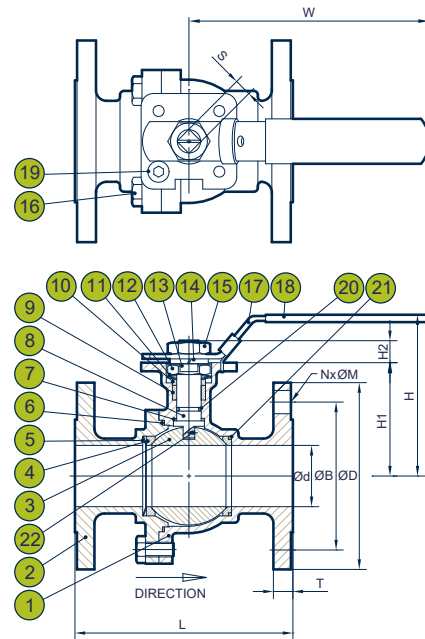
Material of Body:  
CF8M/WCB

Ball Treatment Option			
Ball Treatment	Hardness (HRC)	Temperature (°C)	Media
Hard Chrome HCr	60	350°C	Clean
Nickel Alloy SFNi	55	450°C	Various
Tungsten Carbide TC	85	450°C	Various

#### Material List

No.	PARTS NAME	MATERIALS
1	BODY	CF8M / WCB
2	CAP	CF8M / WCB
3	BALL	CF8M ( Chrome Plating )
4	BALL SEAT	ASTM A276 316 + Stellite #6
5	BALL SEAT SPRING	DIN 17221 50CrV4
6-1	BODY SEAL	PTFE
6-2		GRAPHITE
7-1	THRUST WASHER	PTFE
7-2		GRAPHITE
8	STEM	SS316 / SS304
9	STEM PACKING	GRAPHITE
10	GLAND	SS304
11	BELLEVILLE WASHER	SS301
12	STEM NUT	SS304
13	LOCK SADDLE	SS304
14	HANDLE WASHER	SS304
15	HANDLE NUT	SS304
16	BODY BOLT	A2-70 / ISO 898-1 8.8
17	HANDLE	SS304 / ZINC PLATE STEEL
18	HANDLE SLEEVE	VINYL
19	STOP PIN	SS304 / CARBON STEEL
20	O-RING	VITON
21	BALL SEAT GASKET	GRAPHITE
22	ANTI-STATIC DEVICE	SS316

\* Enclosed is a condensed table. For complete options, contact DIE ERSTE directly.



#### Dimensions (mm)

Size		d	L	H	W	H1	H2	D	B	T	S	N	M	ISO 5211
IN	DN													
1/2"	15	15	108	82	135	45	9	88.9	60.5	11.2	9	4	15.8	F03/F04
3/4"	20	20	117	88	135	50	9	98.6	69.9	11.2	9	4	15.8	F03/F04
1"	25	25	127	92	165	55	12	108	79.2	11.2	11	4	15.8	F04/F05
1 1/2"	40	40	165	112	195	72	16	127	98.6	14.2	14	4	15.8	F05/F07
2"	50	50	178	132	195	92	16	152.4	120.7	15.8	14	4	19.1	F05/F07
2 1/2"	65	65	191	152	300	105	19	177.8	139.7	17.5	17	4	19.1	F07/F10
3"	80	80	203	164	300	116	19	190.5	152.4	19.1	17	4	19.1	F07/F10
4"	100	100	229	194	335	138	24	228.6	190.5	23.9	22	8	19.1	F10/F12

# Direct Mount Metal Seated 2-Piece Floating Ball Valve Uni-direction

## PN16, DN15~DN100

## Series MS2D

### Features

- Special surface hardening treatment for ball and seat provides long working life, options available to suit high temperature, or abrasive fluid such as slurries and pulp stock.
- Valve ball remains in close and tight contact with spring loaded ball seat for maximum sealing effects.
- Machine-lapped ball and seat for tight contact between the two circular surfaces.
- Conforming to ANSI / FCI 70-2 Class V leakage class; Class VI optional.
- Integral twin pattern ISO 5211 direct-mounting pad.

### Standards

- Design: EN 12516.1
- Face-to-Face: DIN 3202 F4
- Flange End Dimensions: EN 1092-1
- Inspection & test acc. to EN 12266-1

PMA: 16 barg@50°C

TMA: Various

Selection:

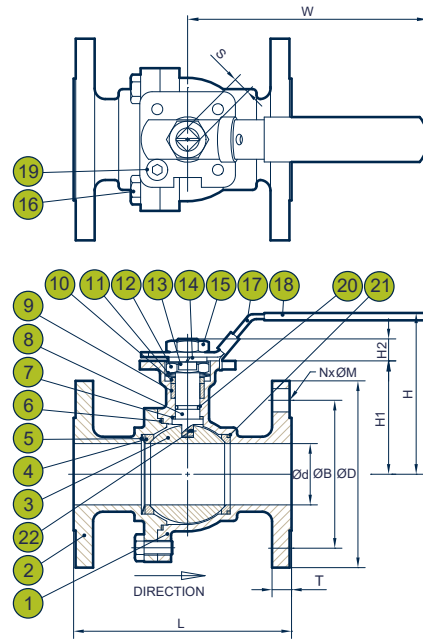
Material of Body:  
1.4408/1.0619

Ball Treatment Option			
Ball Treatment	Hardness (HRC)	Temperature (°C)	Media
Hard Chrome HCr	60	350°C	Clean
Nickel Alloy SFNi	55	450°C	Various
Tungsten Carbide TC	85	450°C	Various

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Material List		
No.	PARTS NAME	MATERIALS
1	BODY	1.4408 / 1.0619
2	CAP	1.4408 / 1.0619
3	BALL	CF8M ( Chrome Plating )
4	BALL SEAT	ASTM A276 316 + Stellite #6
5	BALL SEAT SPRING	DIN 17221 50CrV4
6-1	BODY SEAL	PTFE
6-2		GRAPHITE
7-1	THRUST WASHER	PTFE
7-2		GRAPHITE
8	STEM	1.4401 / 1.4301
9	STEM PACKING	GRAPHITE
10	GLAND	SS304
11	BELLEVILLE WASHER	SS301
12	STEM NUT	SS304
13	LOCK SADDLE	SS304
14	HANDLE WASHER	SS304
15	HANDLE NUT	SS304
16	BODY BOLT	A2-70 / ISO 898-1 8.8
17	HANDLE	SS304 / ZINC PLATE STEEL
18	HANDLE SLEEVE	VINYL
19	STOP PIN	SS304 / CARBON STEEL
20	O-RING	VITON
21	BALL SEAT GASKET	GRAPHITE
22	ANTI-STATIC DEVICE	SS316

\* Enclosed is a condensed table. For complete options, contact DIE ERSTE directly.



### Dimensions (mm)

Size		d	L	H	W	H1	H2	D	B	T	S	N	M	ISO 5211
IN	DN													
1/2"	15	15	115	88	135	49	9	95	65	16	9	4	14	F03/F04
3/4"	20	20	120	93	135	54	9	105	75	18	9	4	14	F03/F04
1"	25	25	125	98	165	59	12	115	85	18	11	4	14	F04/F05
1 1/4"	32	32	130	110	165	72	12	140	100	18	11	4	18	F04/F05
1 1/2"	40	38	140	116	195	77	16	150	110	18	14	4	18	F05/F07
2"	50	50	150	124	195	85	16	165	125	20	14	4	18	F05/F07
2 1/2"	65	64	170	152	300	105	19	185	145	18	17	4	18	F07/F10
3"	80	76	180	164	300	116	19	200	160	20	17	8	18	F07/F10
4"	100	100	190	194	335	138	24	220	180	20	22	8	18	F10/F12

# Direct Mount Metal Seated 2-Piece Floating Ball Valve Uni-direction

## PN40, DN15~DN100

## Series MS2D

### Features

- Special surface hardening treatment for ball and seat provides long working life, options available to suit high temperature, or abrasive fluid such as slurries and pulp stock.
- Valve ball remains in close and tight contact with spring loaded ball seat for maximum sealing effects.
- Machine-lapped ball and seat for tight contact between the two circular surfaces.
- Conforming to ANSI / FCI 70-2 Class V leakage class; Class VI optional.
- Integral twin pattern ISO 5211 direct-mounting pad.

### Standards

- Design: EN 12516.1
- Face-to-Face: DIN 3202 F4
- Flange End Dimensions: EN 1092-1
- Inspection & test acc. to EN 12266-1

PMA: 40 barg@50°C

TMA: Various

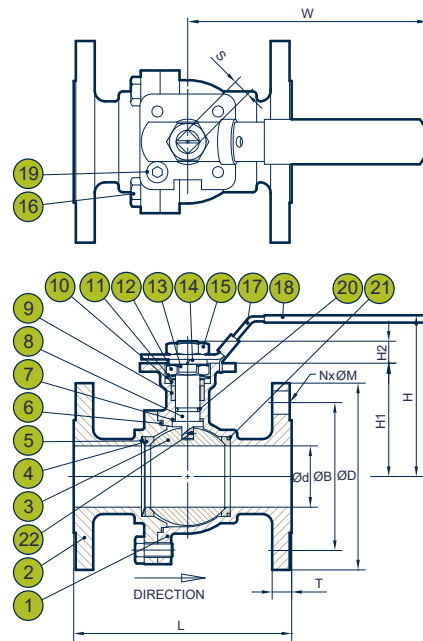
Selection:

Material of Body:  
1.4408/1.0619

Ball Treatment Option			
Ball Treatment	Hardness (HRC)	Temperature (°C)	Media
Hard Chrome HCr	60	350°C	Clean
Nickel Alloy SFNi	55	450°C	Various
Tungsten Carbide TC	85	450°C	Various

Material List		
No.	PARTS NAME	MATERIALS
1	BODY	1.4408 / 1.0619
2	CAP	1.4408 / 1.0619
3	BALL	CF8M ( Chrome Plating )
4	BALL SEAT	ASTM A276 316 + Stellite #6
5	BALL SEAT SPRING	DIN 17221 50CrV4
6-1	BODY SEAL	PTFE
6-2		GRAPHITE
7-1	THRUST WASHER	PTFE
7-2		GRAPHITE
8	STEM	1.4401 / 1.4301
9	STEM PACKING	GRAPHITE
10	GLAND	SS304
11	BELLEVILLE WASHER	SS301
12	STEM NUT	SS304
13	LOCK SADDLE	SS304
14	HANDLE WASHER	SS304
15	HANDLE NUT	SS304
16	BODY BOLT	A2-70 / ISO 898-1 8.8
17	HANDLE	SS304 / ZINC PLATE STEEL
18	HANDLE SLEEVE	VINYL
19	STOP PIN	SS304 / CARBON STEEL
20	O-RING	VITON
21	BALL SEAT GASKET	GRAPHITE
22	ANTI-STATIC DEVICE	SS316

\* Enclosed is a condensed table. For complete options, contact DIE ERSTE directly.



Dimensions (mm)

Size		d	L	H	W	H1	H2	D	B	T	S	N	M	ISO 5211
IN	DN													
1/2"	15	15	115	88	135	49	9	95	65	16	9	4	14	F03/F04
3/4"	20	20	120	93	135	54	9	105	75	18	9	4	14	F03/F04
1"	25	25	125	98	165	59	12	115	85	18	11	4	14	F04/F05
1 1/4"	32	32	130	110	165	72	12	140	100	18	11	4	18	F04/F05
1 1/2"	40	38	140	116	195	77	16	150	110	18	14	4	18	F05/F07
2"	50	50	150	124	195	85	16	165	125	20	14	4	18	F05/F07
2 1/2"	65	64	170	152	300	105	19	185	145	22	17	8	18	F07/F10
3"	80	76	180	164	300	116	19	200	160	24	17	8	18	F07/F10
4"	100	100	190	194	335	138	24	235	190	24	22	8	22	F10/F12