

Mars Ball Valves. A Proven Brand. A Trusted Partner.



JOHN VALVES
Official Australian Distributor
of Mars Valves

Certified System



Quality
ISO 9001

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NSW	0411 749 507



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Mars Ball Valves. Precision built. Locally backed.

You're responsible for getting the right valve — first time.

You need a solution that works under pressure, meets your specs, and arrives when you need it.

That's why **John Valves** has partnered with **Mars Valve Co.** — a global leader in stainless steel ball valves, trusted for their **ISO-certified quality** and **fire-safe design**.

Now available in Australia, Mars Ball Valves are ready-to-ship and backed by a name you already know.

With **John Valves' 130-year legacy** of engineering support and repair capability, you're not just buying a valve — you're gaining a partner in performance.



130 YEARS OF AUSTRALIAN MANUFACTURING



Mars Ball Valves - Core Catalogue

As the authorised Australian distributor of Mars Valve Co., John Valves is proud to offer a core range of precision-engineered ball valves trusted across process, water, energy, and manufacturing sectors.

This selection includes our most in-demand series — including Series 20, 50-1C, 55A, 77, 83, 88, 90, 90D and 91D — with features like full-bore flow, threaded or flanged ends, ISO mounting pads, and fire-safe or anti-static options.

Backed by local stock and technical expertise, we provide reliable, compliant valve solutions for both new projects and ongoing maintenance.



Series 20



Series 50-1C



Series 55A



Series 77



Series 77-20



Series 83R-10



Series 83-1F



Series 88R



Series 90-1F



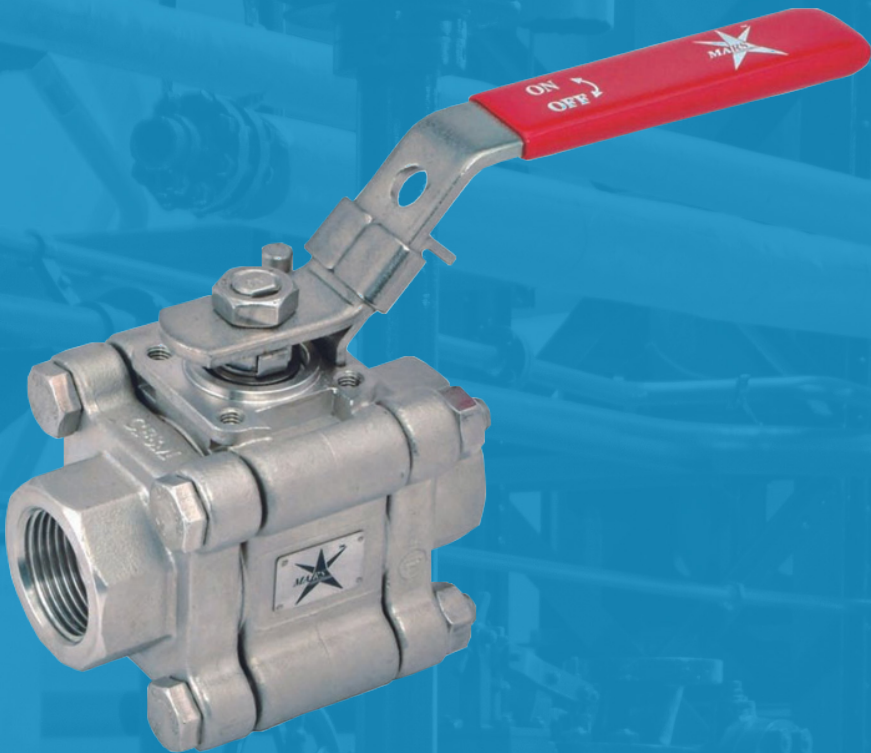
Series 90D-1F



Series 90D-2F



Series 91D



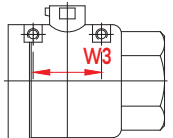
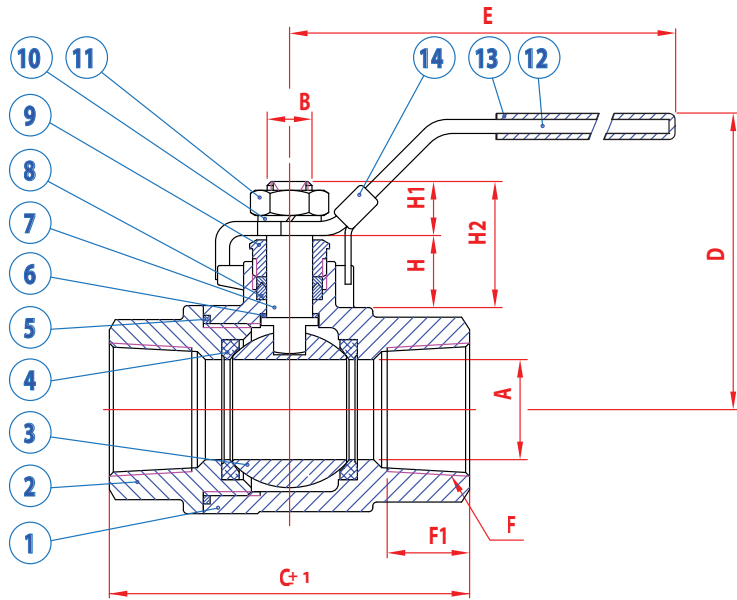
Standardised Dimensions, Streamlined Projects

Mars Ball Valves are manufactured with consistent face-to-face dimensions, ensuring that every valve in the range can be easily replaced without modification to existing pipework. This repeatability means fewer installation issues, reduced downtime, and confidence that future replacements will fit seamlessly. By supplying valves with uniform sizing, John Valves helps you plan ahead with certainty and keep your systems running smoothly.

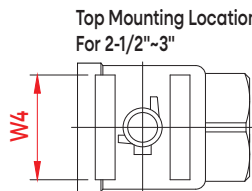


Series 20		Core Catalogue	
Body Types: WCB or CF8M Stainless Steel		Construction: 2-Piece Body	
Ball: 316 Stainless Steel		Bore Type: Full Bore	
Seat: PTFE		Operation: Locking Lever Handle	
Rating: 1000 PSI		Connection Type: BSPP, NPT	

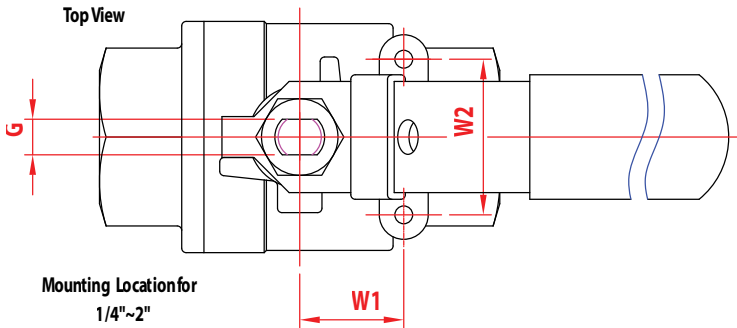
Series 20 Stock Range	8mm	15mm	20mm	25mm	32mm	40mm	50mm
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Side Mounting Location
For 2-1/2"-3"



Top Mounting Location
For 2-1/2"-3"



Mounting Location for
1/4"-2"

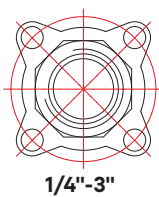
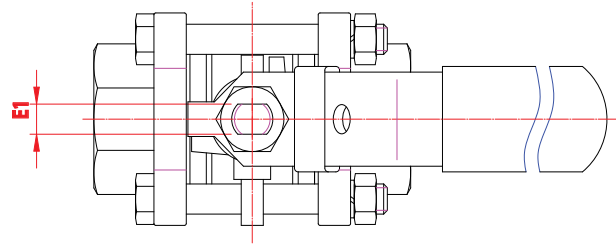
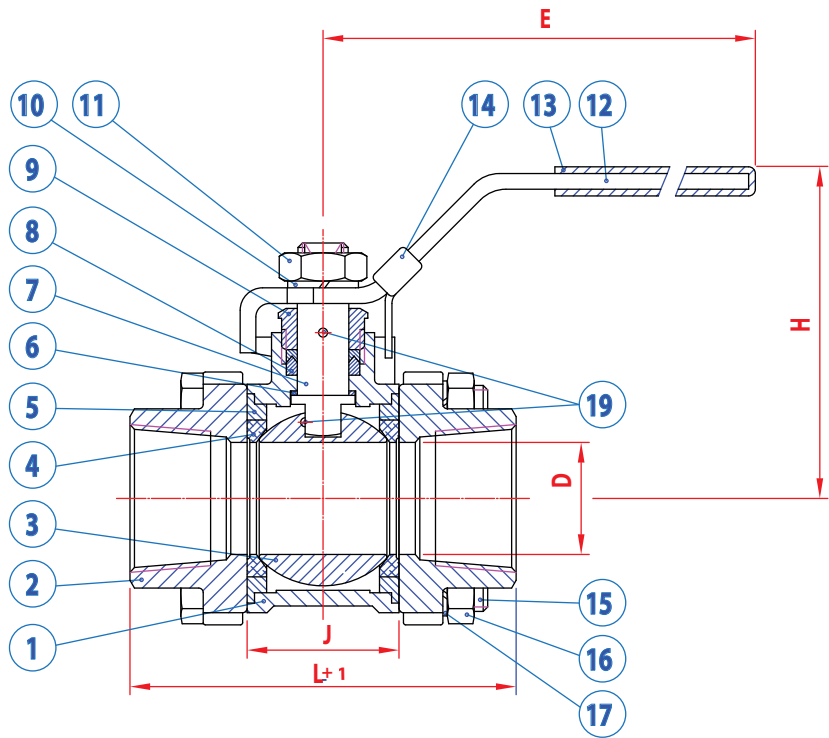
Material List			
No.	Part Name	Qty	Material
1	Body	1	ASTM A351 Gr. CF8M
2	End Cap	1	ASTM A351 Gr. CF8M
3	Ball	1	SS316/CF8M
4	Seat	2	PTFE/RTFE
5	Joint Gasket	1	PTFE
6	Stem seal	1	PTFE
7	Stem	1	ASTM A276 SS316
8	Stem Packing	1Set	PTFE
9	Gland Nut	1	AISI 304
10	Stem Washer	1	AISI 304
11	Stem Nut	1	AISI 304
12	Handle	1	AISI 304
13	Handle Sleeve	1	VINYL
14	Locking Device	1	AISI 304

Dimensions (mm)															
SIZE	ØA	ØB	C	D	E	F1	F	G	H	H1	H2	W1	W2	W3	W4
1/4"	11.5	8	55	50	100	15	1/4" PF-NPT-PT	5	8	9.8	22.3	12.7	28.5		
3/8"	12.5	8	55	50	100	15	3/8" PF-NPT-PT	5	8	9.8	22.3	12.7	28.5		
1/2"	15	9.5	65	60	130	16	1/2" PF-NPT-PT	6.5	10.5	11	25.6	12.7	28.5		
3/4"	20	9.5	74.6	64	130	17	3/4" PF-NPT-PT	6.5	10.5	11	25.6	22.4	35		
1"	25	11	88	71	165	20.4	1" PF-NPT-PT	8	11.5	13.5	31.5	23.4	35		
1-1/4"	32	11	102	78	165	22	1-1/4" PF-NPT-PT	8	11.5	13.5	31.5	25.4	38.1		
1-1/2"	38	14	110	86	190	22.5	1-1/2" PF-NPT-PT	9.7	12	15.6	35.1	25.4	38.1		
2"	50	14	125	95	190	26	2" PF-NPT-PT	9.7	9.5	15.6	30.6	25.4	38.1		
2-1/2"	65	19	160.6	130	250	31	2-1/2" PF-NPT-PT	12	17	24.5	54.2			59	61
3"	80	19	178	148	250	34	3" PF-NPT-PT	12	18	24.5	55.2			70	71

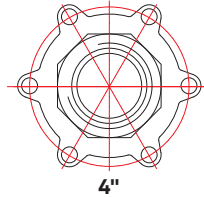


Series 50-1C		Core Catalogue	
Body Types: CF8M Stainless Steel		Construction: 3-Piece Body	
Ball: 316 Stainless Steel		Bore Type: Full Bore	
Seat: PTFE		Operation: Locking Lever Handle	
Rating: 1000 PSI		Connection Type: BSPP	

Series 50-1C Stock Range	25mm	40mm	50mm
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1/4"-3"



4"

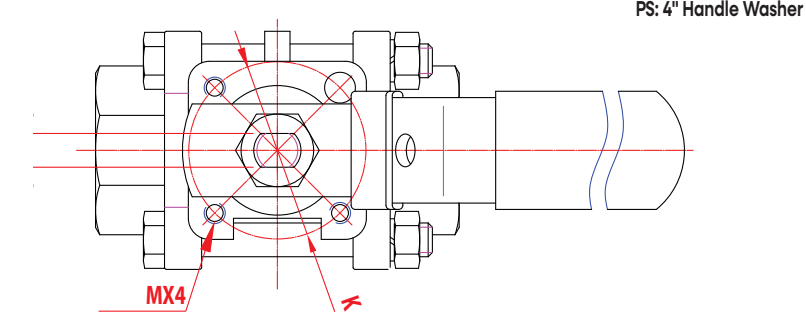
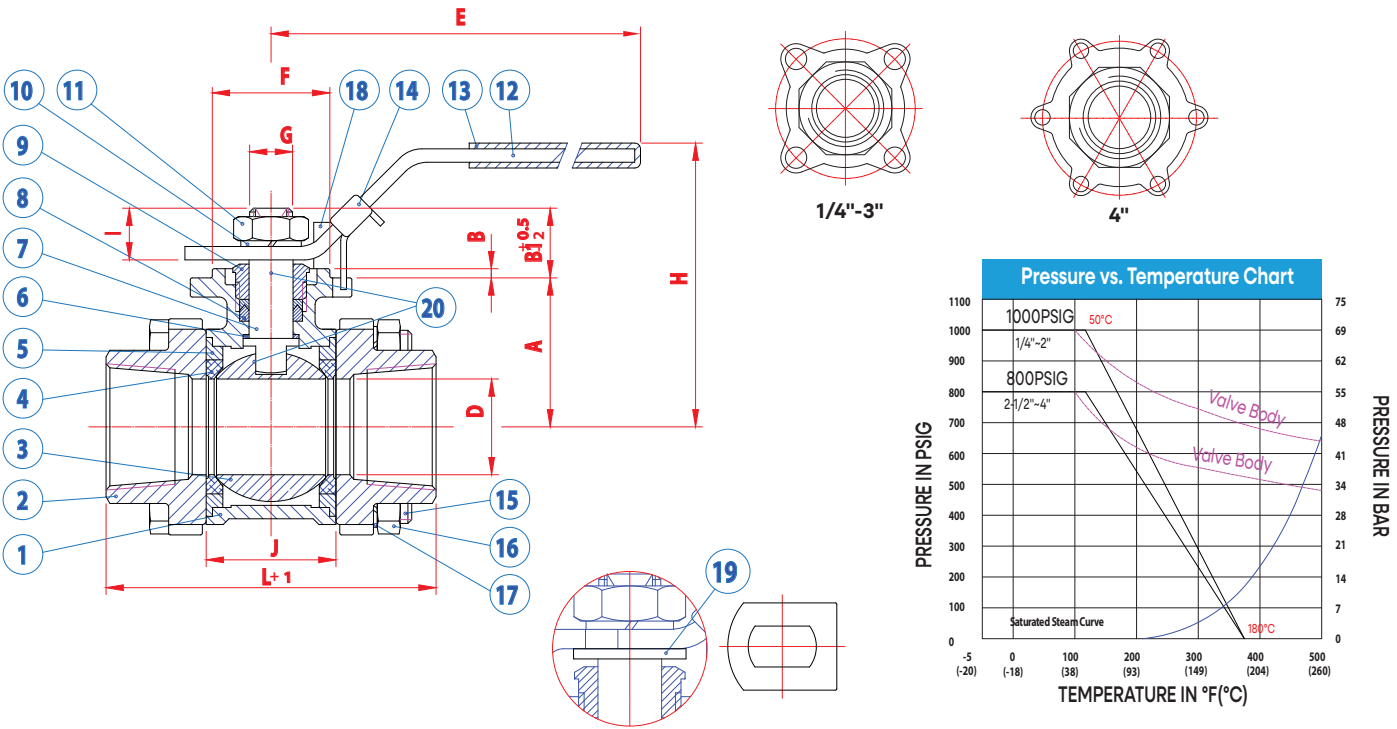
Materials List			
No.	Part Name	Qty	Material
1	Body	1	CF8M/WCB
2	End Cap	2	CF8M/WCB
3	Ball	1	SS316/CF8M
4	Seat	2	PTFE/RTFE
5	(Joint Gasket) Lip-shaped flakes	2	PTFE
6	Stem Seal	1	PTFE
7	Stem	1	SS316
8	Stem Packing	1Set	PTFE
9	Gland	1	SS304
10	Stem Washer	1	SS304
11	Stem Nut	1	SS304
12	Handle	1	SS304
13	Handle Sleeve	1	VINYL
14	Locking Device	1	SS304
15	Bolt	*	SS304/B7
16	Bolt Nut	&	SS304/2H
17	Blot Washer	&	SS304
18	Handle Washer	@	SS304
19	Anti-static Device	2	SS316

Dimensions (mm)							
SIZE	ØD	L	H	E	E1	J	DN
1/4"	11.6	56.6	54	102	5	18.6	1/4" PF-NPT-PT
3/8"	12.7	56.6	54	102	5	18.6	3/8" PF-NPT-PT
1/2"	15	65.7	64	132	6.5	23.6	1/2" PF-NPT-PT
3/4"	20	76.2	67	132	6.5	28	3/4" PF-NPT-PT
1"	25	86.2	75	167	8	33.9	1" PF-NPT-PT
1-1/4"	32	102.8	80	167	8	42.5	1-1/4" PF-NPT-PT
1-1/2"	38	119.4	90	192	9.7	53.2	1-1/2" PF-NPT-PT
2"	50	131.4	98	192	9.7	64.6	2" PF-NPT-PT
2-1/2"	65	164	137	252	12	87	2-1/2" PF-NPT-PT
3"	80	182.7	147	252	12	99	3" PF-NPT-PT
4"	100	235.6	175	282	15	127	4" PF-NPT-PT



Series 55A		Core Catalogue
Body Types:	CF8M Stainless Steel	Construction: 3-Piece Body
Ball:	316 Stainless Steel	Bore Type: Full Bore
Seat:	PTFE	Operation: Locking Lever Handle
Rating:	1000 PSI	Connection Type: BSPP

Series 55A Stock Range	15mm	20mm	25mm	32mm	40mm	50mm
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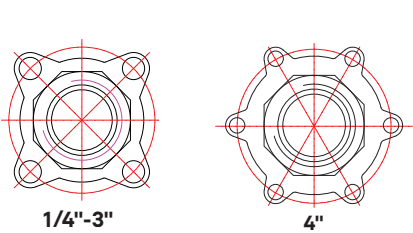
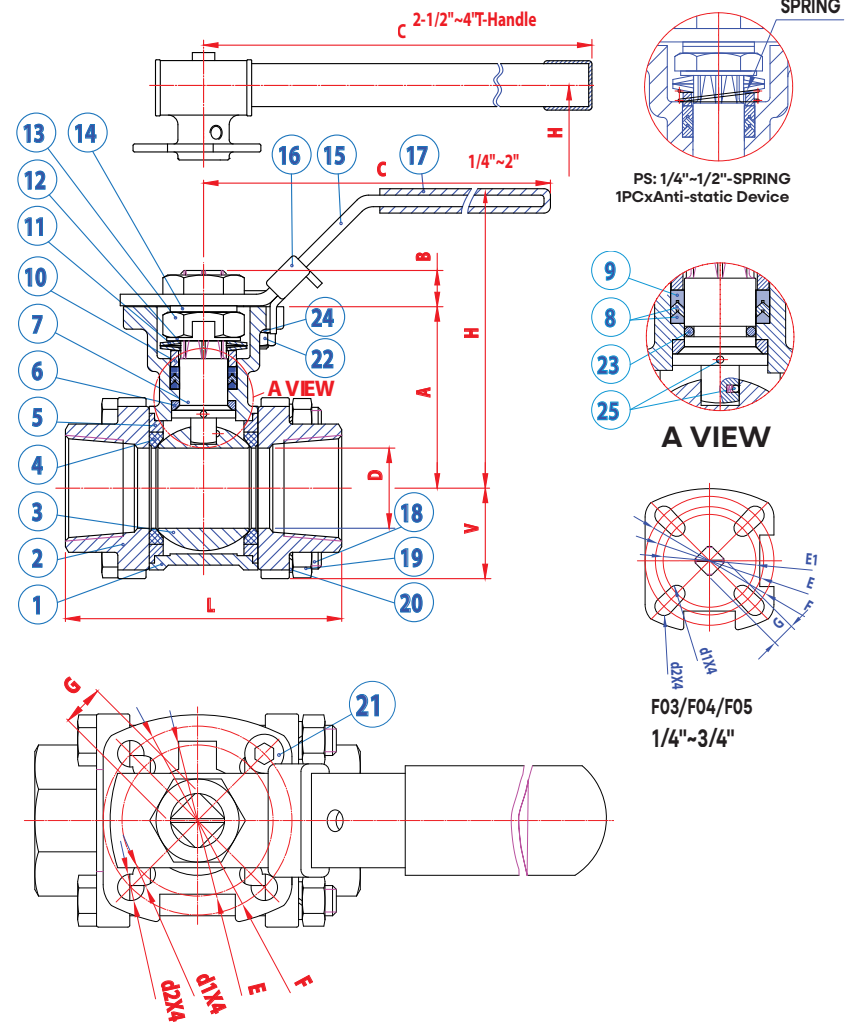
Dimensions (mm)														
SIZE	ØD	B	B1	A	E	ØF	ØG	H	I	J	J1	ØK	L	M
1/4"	11.6	2	17.3	29.5	130	25	9.5	65	11	23.6	6.5	36	63.7	M5
3/8"	12.7	2	17.3	29.5	130	25	9.5	65	11	23.6	6.5	36	63.7	M5
1/2"	15	2	17.3	29.5	130	25	9.5	65	11	23.6	6.5	36	65.7	M5
3/4"	20	2	17.3	33	130	25	9.5	68	11	28	6.5	36	76.2	M5
1"	25	2	18.7	39	160	30	11	80	13.5	33.9	8	42	86.2	M5
1-1/4"	32	2	22.5	41	160	30	11	85	13.5	42.5	8	42	102.8	M5
1-1/2"	38	2	25.1	47	185	35	14	94	15.6	53.2	9.7	50	119.4	M6
2"	50	2	25.1	55.5	185	35	14	103	15.6	64.6	9.7	50	131.4	M6
2-1/2"	65	2	40.2	72.5	260	55	19	143	24.5	87	12	70	164	M8
3"	80	2	36.9	85	260	70	19	153	24.5	99	12	102	182.7	M10
4"	100	2	40.7	107	290	70	19	180	27.5	127	15	102	235.6	M10

Material List			
No.	Part Name	Qty	Material
1	Body	1	CF8M
2	End Cap	2	CF8M
3	Ball	1	SS316/CF8M
4	Seat	2	PTFE
5	(Joint Gasket) Lip-shaped flaps	2	PTFE
6	Stem seal	1	PTFE
7	Stem	1	SS316
8	Stem Packing	1Set	PTFE
9	Gland Nut	1	SS304
10	Stem Washer	1	SS304
11	Stem Nut	1	SS304
12	Handle	1	SS304
13	Handle Sleeve	1	VINYL
14	Locking Device	1	SS304
15	Bolt	*	SS304/B7
16	Bolt Nut	&	SS304/2H
17	Blot Washer	&	SS304
18	Stop Pin	1	SS304
19	Handle Washer	@	SS304
20	Anti-Static Device	2	SS316



Series 77		Core Catalogue
Body Types:	CF8M	Construction: 3-Piece Body
Ball:	316 Stainless Steel	Bore Type: Full Bore
Seat:	RTFE	Operation: Locking Lever Handle
Rating:	1000 PSI (15-50mm), 800 PSI (65-80mm)	Connection Type: BSPP, NPT

Series 77 Stock Range	15mm	20mm	25mm	32mm	40mm	50mm	65mm	80mm
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Dimensions (mm)														
SIZE	ØD	A	B	C	ØE1	ØE	ØF	G	L	H	V	Ød1	Ød2	ISO5211
1/4"	11.6	40.1	8.1	150	36	42	50	9	63.7	84	23.3	6.5	7	FOR F03 FOR F04 FOR F05 FOR F06 FOR F07 FOR F08 FOR F09 FOR F10 FOR F11
3/8"	12.7	40.1	8.1	150	36	42	50	9	63.7	84	23.3	6.5	7	FOR F03 FOR F04 FOR F05 FOR F06 FOR F07 FOR F08 FOR F09 FOR F10 FOR F11
1/2"	15	40.1	8.1	150	36	42	50	9	65.7	84	23.3	6.5	7	FOR F03 FOR F04 FOR F05 FOR F06 FOR F07 FOR F08 FOR F09 FOR F10 FOR F11
3/4"	20	48	8.1	150	36	42	50	9	76.2	90	25.4	6.5	7	FOR F03 FOR F04 FOR F05 FOR F06 FOR F07 FOR F08 FOR F09 FOR F10 FOR F11
1"	25	56.6	10.9	165		42	50	11	86.2	96	28.3	6	7	FOR F04 FOR F05 FOR F06 FOR F07 FOR F08 FOR F09 FOR F10 FOR F11
1-1/4"	32	60.9	10.9	165		42	50	11	102.8	100	34.5	6	7	FOR F04 FOR F05 FOR F06 FOR F07 FOR F08 FOR F09 FOR F10 FOR F11
1-1/2"	38	77.5	13.9	215		50	70	14	119.4	127	39.3	7.5	9	FOR F05 FOR F06 FOR F07 FOR F08 FOR F09 FOR F10 FOR F11
2"	50	85.2	13.9	215		50	70	14	131.4	134	47.3	7.5	9	FOR F05 FOR F06 FOR F07 FOR F08 FOR F09 FOR F10 FOR F11
2-1/2"	65	108.7	16.8	300		70	102	17	164	167	58.5	10	12	FOR F07 FOR F08 FOR F09 FOR F10 FOR F11
3"	80	117.7	17.8	370		70	102	17	182.7	176	69	10	12	FOR F07 FOR F08 FOR F09 FOR F10 FOR F11
4"	100	132.55	17.8	370		70	102	17	235.6	192	95.4	10	12	FOR F07 FOR F10

Material List			
No.	Part Name	Qty	Material
1	Body	1	CF8M/WCB
2	End Cap	2	CF8M/WCB
3	Ball	1	SS316/CF8M
4	Seat	2	RTFE
5	(Joint Gasket) Lip Seal Gasket	2	PTFE
6	Stem Seal	1	RTFE
7	Stem	1	SS316
8	Stem Packing	#	PTFE
9	Stem Packing	1	25% GLASS FIBER FILLED+ PTFE
10	Gland	1	SS304
11	Belleville Washer	2	SS301
12	Lock saddle	1	SS304
13	Stem Nut	2	SS304
14	Stem Washer	1	SS304
15	Handle	1	SS304
16	Locking Device	1	SS304
17	Handle sleeve	1	VINYL
18	Bolt	*	SS304/B7
19	Bolt Nut	&	SS304/2H
20	Blot Washer	&	SS304
21	Stop Pin	1	SS304
22	Pin Nut	1	SS304
23	O-Ring	1	VITON
24	Washer	1	SS304
25	Anti-static Device	@	SS316

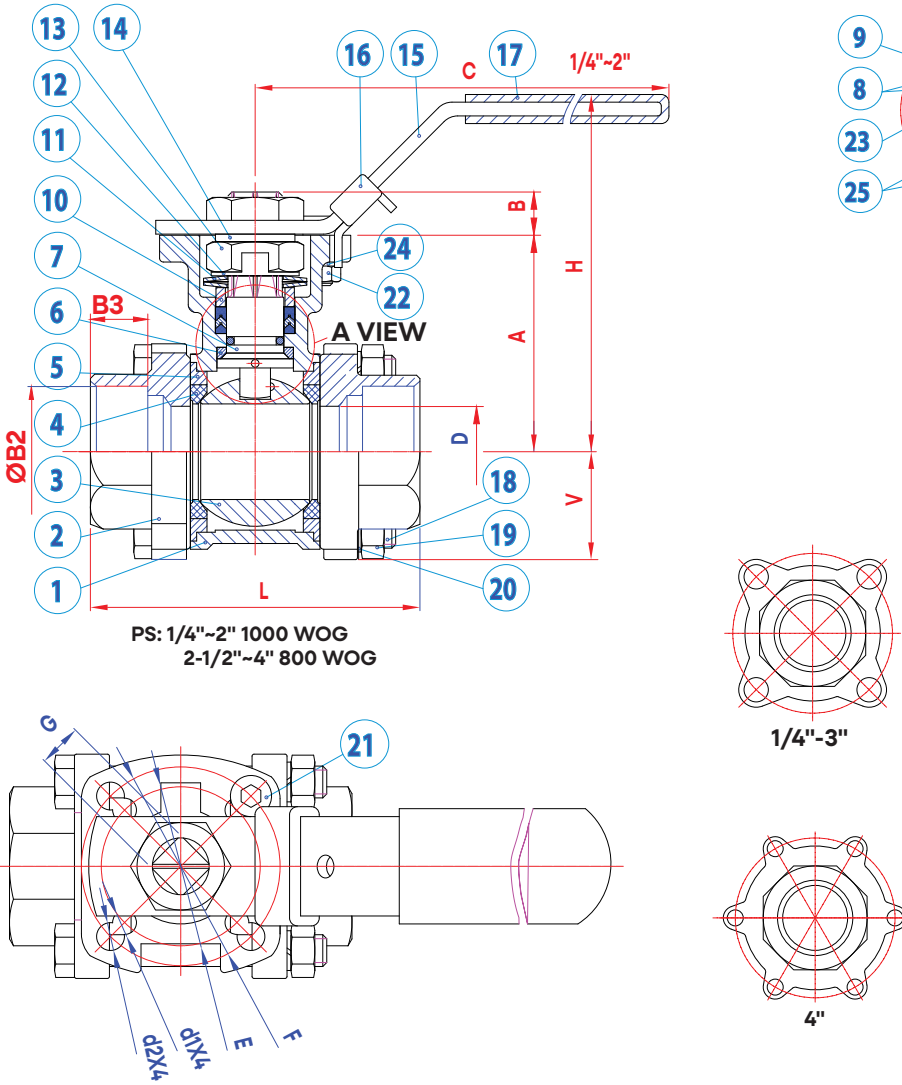


Series 77-20

Core Catalogue

Body Types: CF8M	Construction: 3-Piece Body
Ball: 316 Stainless Steel	Bore Type: Full Bore
Seat: RTFE	Operation: Lever Operator
Rating: 1000 PSI	Connection Type: Socket Weld Ends

Series 77-20 Stock Range	15mm	20mm	25mm	40mm	50mm
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PS: 1/4"-2" 1000 WOG
2-1/2"-4" 800 WOG

1/4"-3"

4"

Material List

No.	Part Name	Qty.	Material
1	Body	1	CF8M/WCB
2	End Cap	2	CF3M/WCB
3	Ball	1	SS316/CF8M
4	Seat	2	RTFE
5	(Joint Gasket) Lip Seal Gasket	2	PTFE
6	Stem Seal	1	RTFE
7	Stem	1	SS316
8	Stem Packing	#	PTFE
9	Stem Packing	1	25% GLASS FIBER FILLED+PTFE
10	Gland	1	SS304
11	Belleville Washer	2	SS301
12	Lock saddle	1	SS304
13	Stem Nut	2	SS304
14	Stem Washer	1	SS304
15	Handle	1	SS304
16	Locking Device	1	SS304
17	Handle sleeve	1	VINYL
18	Bolt	*	SS304/B7
19	Bolt Nut	&	SS304/2H
20	Blot Washer	&	SS304
21	Stop Pin	1	SS304
22	Pin Nut	1	SS304
23	O-Ring	1	VITON
24	Washer	1	SS304
25	Anti-static Device	@	SS316

DIMENSIONS(mm)															
SIZE	ØD	A	B	ØB2	B3	C	ØE1	ØE	ØF	G	L	H	V	Ød1	ISO5211
1/4"	11.6	40.1	8.1	14.3	10	150	36	42	50	9	63.7	84	23.3	6.5	F03/F04/F05
3/8"	12.7	40.1	8.1	17.6	10	150	36	42	50	9	63.7	84	23.3	6.5	F03/F04/F05
1/2"	15	40.1	8.1	21.9	10	150	36	42	50	9	65.7	84	23.3	6.5	F03/F04/F05
3/4"	20	48	8.1	27.3	13	150	36	42	50	9	76.2	90	25.4	6.5	F03/F04/F05
1"	25	56.6	10.9	33.9	13	165		42	50	11	86.2	96	28.3	6	F04/F05
1-1/4"	32	60.9	10.9	42.8	13	165		42	50	11	102.8	100	34.5	6	F04/F05
1-1/2"	38	77.5	13.9	48.9	13	215		50	70	14	119.4	127	39.3	7.5	F05/F07
2"	50	85.2	13.9	61.3	16	215		50	70	14	131.4	134	47.3	7.5	F05/F07
2-1/2"	65	108.7	16.8	ANSI 74 PN 76.9 90	16	300		70	102	17	164	167	58.5	10	F07/F10
3"	80	117.7	17.8	90	16	370		70	102	17	182.7	176	69	10	F07/F10
4"	100	132.55	17.8	115.5	20	370		70	102	17	235.6	192	95.4	10	F07/F10

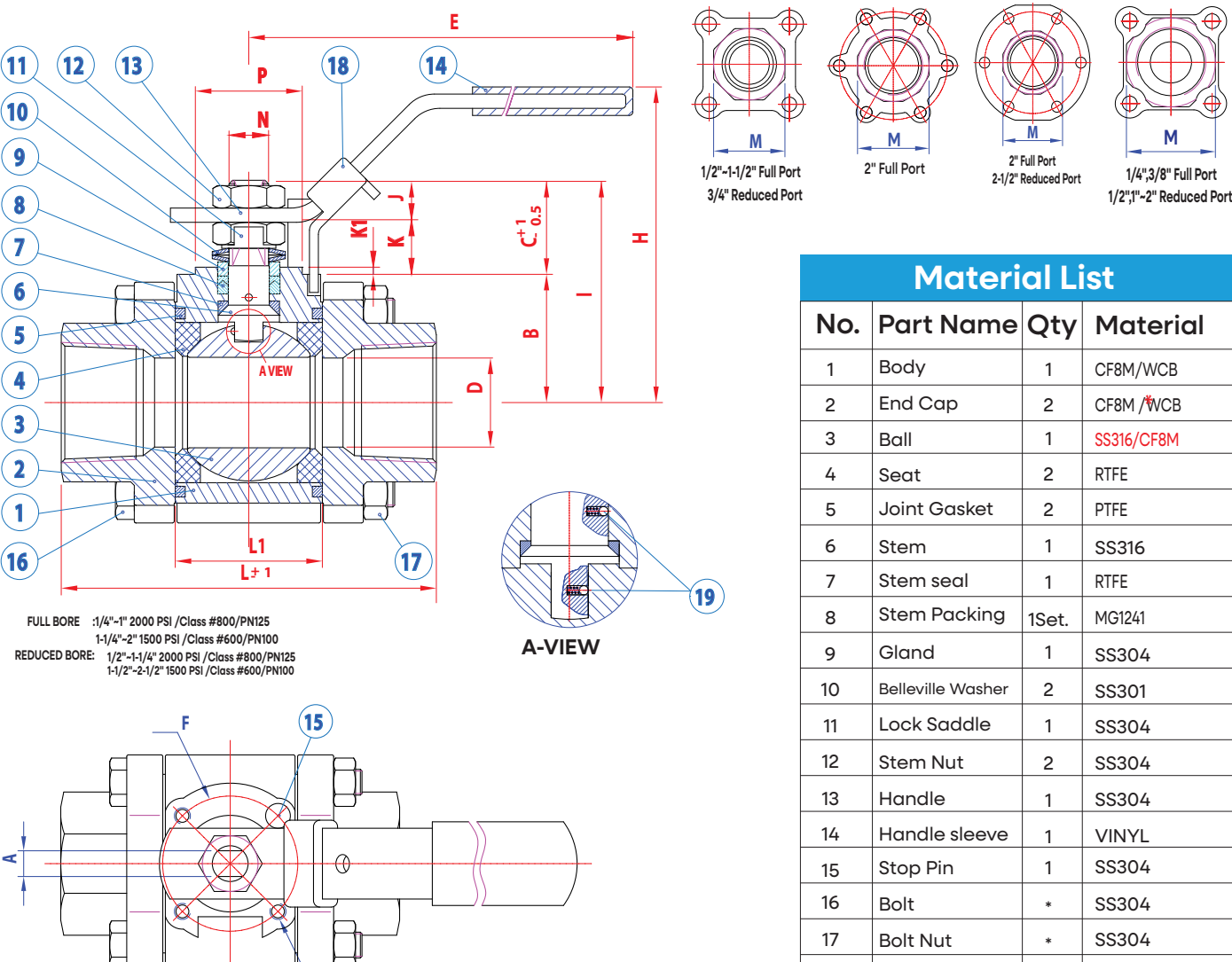


Series 83R-10

Core Catalogue

Body Types: CF8M	Construction: 3-Piece Body
Ball: 316 Stainless Steel	Bore Type: Reduced Bore
Seat: RTFE	Operation: Lever Operatore
Rating: 2000 PSI/1500 PSI	Connection Type: BSPP

Series 83R-10 Stock Range	15mm	20mm	25mm	50mm
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1/2"-1-1/2" Full Port
3/4" Reduced Port

2" Full Port

2" Full Port
2-1/2" Reduced Port

1/4", 3/8" Full Port
1/2", 1" Reduced Port

Material List

No.	Part Name	Qty	Material
1	Body	1	CF8M/WCB
2	End Cap	2	CF8M/WCB
3	Ball	1	SS316/CF8M
4	Seat	2	RTFE
5	Joint Gasket	2	PTFE
6	Stem	1	SS316
7	Stem seal	1	RTFE
8	Stem Packing	1Set	MG1241
9	Gland	1	SS304
10	Belleville Washer	2	SS301
11	Lock Saddle	1	SS304
12	Stem Nut	2	SS304
13	Handle	1	SS304
14	Handle sleeve	1	VINYL
15	Stop Pin	1	SS304
16	Bolt	*	SS304
17	Bolt Nut	*	SS304
18	Locking Device	1	SS304
19	Anti-static Device	2	SS316

Dimensions (mm)																																				
SIZE	ØD		A		B		C		E		ØF		G		H		I		J		K		K1		L		L1		M		ØP		ØN		ISO5211	
	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R		
1/4"	10	/	6.5	/	29.8	/	7.4	/	134	/	36	/	M5	/	64.3	/	37.2	/	6.1	/	1.3	/	0.5	/	64.8	/	20.5	/	29.5	/	25	/	9.5	/	F03	/
3/8"	10	/	6.5	/	29.8	/	7.4	/	134	/	36	/	M5	/	64.3	/	37.2	/	6.1	/	1.3	/	0.5	/	64.8	/	20.5	/	29.5	/	25	/	9.5	/	F03	/
1/2"	15	10	6.5	6.5	29	29.8	16.1	7.4	134	134	36	36	M5	M5	71.5	64.3	45.1	37.2	7.3	6.1	8.8	1.3	2	0.5	72.5	64.8	24.5	20.5	30	29.5	25	25	9.5	9.5	F03	F03
3/4"	20	15	6.5	6.5	33	29	18.1	16.1	134	134	36	36	M5	M5	76	71.5	51.1	45.1	8.8	7.3	9.3	8.8	2	2	85.4	72.5	31.4	24.5	36	36	25	25	9.5	9.5	F03	F03
1"	25	20	8	6.5	36	33	24.6	18.1	170	134	42	36	M5	M5	82.3	76	60.6	51.1	11	8.8	13.6	9.3	2	2	105.3	85.4	41.3	31.4	44.5	44.5	30	25	11.1	9.5	F04	F03
1-1/4"	32	25	8	8	40	36	24.3	24.6	170	170	42	42	M5	M5	87.3	82.3	64.3	60.6	9.7	11	14.6	13.6	2	2	111	105.3	48.4	41.3	54	54	30	30	11.1	11.1	F04	F04
1-1/2"	38	32	9.7	8	47.3	40	30.2	24.3	207	170	50	42	M6	M5	103.6	87.3	77.5	64.3	12.2	9.7	18	14.6	2.2	2	127.3	111	56.3	48.4	60	60	35	30	14.3	11.1	F05	F04
2"	50	38	9.7	9.7	69.5	47.3	26	30.2	207	207	50	50	M6	M6	121.6	103.6	95.5	77.5	12.6	12.2	13.4	18	1.5	2.2	142.8 (45Round)	127.3	71.4	56.3	73.2	73.2	35	35	14.3	14.3	F05	F05
2-1/2"	50	/	9.7	/	69.5	/	26	/	207	/	50	/	M6	/	121.6	/	95.5	/	12.6	/	13.4	/	1.5	/	145	/	71.4	/	86	/	35	/	14.3	/	F05	/



Series 83-1F

Core Catalogue

Body Types: CF8M

Construction: 3-Piece Body

Ball: 316 Stainless Steel

Bore Type: Full Bore

Seat: PTFE

Operation: Lever Operator

Rating: 2000 PSI/1500 PSI

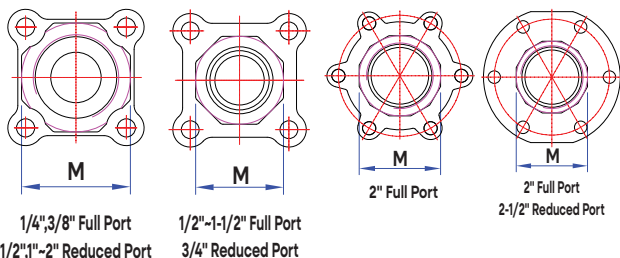
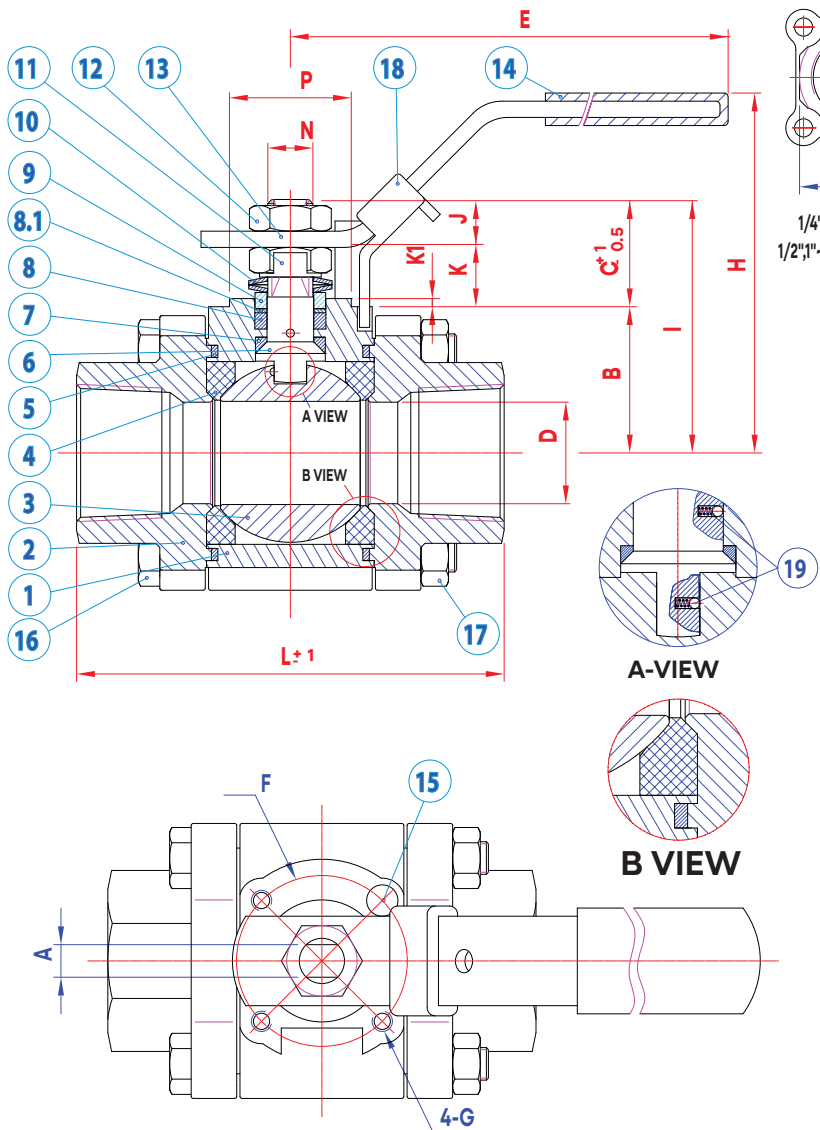
Connection Type: NPT

Series 83-1F Stock Range

20mm

25mm

50mm



Material List

No.	Part Name	Qty	Material
1	Body	1	CF8M/WCB
2	End Cap	2	CF8M*/WCB
3	Ball	1	SS316/CF8M
4	Seat	2	RPTFE
5	Joint Gasket	2	Graphite
6	Stem	1	ASTM A276 SS316
7	Stem seal	1	RPTFE
8	Stem Packing	1	Graphite
8.1	Stem Packing	1	RPTFE
9	Gland	1	SS304
10	Belleville Washer	2	SS301
11	Lock saddle	1	SS304
12	Stem Nut	2	SS304
13	Handle	1	SS304
14	Handle sleeve	1	VINYL
15	Stop Pin	1	SS304
16	Bolt	*	SS304
17	Bolt Nut	*	SS304
18	Locking Device	1	SS304
19	Anti-static Device	2	SS316

Dimensions (mm)

Size	ØD		A		B		C		E		ØF		G		H		I		J		K		K1		L		M		ØP		ØN		ISO5211	
	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R
1/4"	10	6.5	29.8	7.4	134	36	M5	64.3	37.2	6.1	1.3	0.5	64.8	29.5	25	9.5	F03																	
3/8"	10	6.5	29.8	7.4	134	36	M5	64.3	37.2	6.1	1.3	0.5	64.8	29.5	25	9.5	F03																	
1/2"	15	10	6.5	29	29.8	16.1	7.4	134	134	36	36	M5	M5	71.5	64.3	45.1	37.2	7.3	6.1	8.8	1.3	2	0.5	72.5	64.8	30	29.5	25	25	9.5	9.5	F03	F03	
3/4"	20	15	6.5	33	29	18.1	16.1	134	134	36	36	M5	M5	76	71.5	51.1	45.1	8.8	7.3	9.3	8.8	2	2	85.4	72.5	36	36	25	25	9.5	9.5	F03	F03	
1"	25	20	8	36	33	24.6	18.1	170	134	42	36	M5	M5	82.3	76	60.6	51.1	11	8.8	13.6	9.3	2	2	105.3	85.4	44.5	44.5	30	25	11.1	9.5	F04	F03	
1-1/4"	32	25	8	40	36	24.3	24.6	170	170	42	42	M5	M5	87.3	82.3	64.3	60.6	9.7	11	14.6	13.6	2	2	111	105.3	54	54	30	30	11.1	11.1	F04	F04	
1-1/2"	38	32	9.7	8	47.3	40	30.2	24.3	207	170	50	42	M6	M5	103.6	87.3	77.5	64.3	12.2	9.7	18	14.6	2.2	2	127.3	111	60	60	35	30	14.3	11.1	F05	F04
2"	50	38	9.7	69.5	47.3	26	30.2	207	207	50	50	M6	M6	121.6	103.6	95.5	77.5	12.6	12.2	13.4	18	1.5	2.2	142.8 (145Round)	127.3	73.2	73.2	35	35	14.3	14.3	F05	F05	
2-1/2"	50	9.7	69.5	26	207	50	M6	121.6	95.5	12.6	13.4	1.5	145	86	35	14.3	14.3																F05	



Series 88R

Core Catalogue

Body Types: CF8M

Construction: 3-Piece Body

Ball: 316 Stainless Steel

Bore Type: Reduced Bore

Seat: 50% PTFE / 50% Stainless Steel or full PTFE (varies by model)

Operation: Locking Lever Handle

Rating: 2000/1500/1000 PSI

Connection Type: BSPP, NPT

Series 88R Stock Range

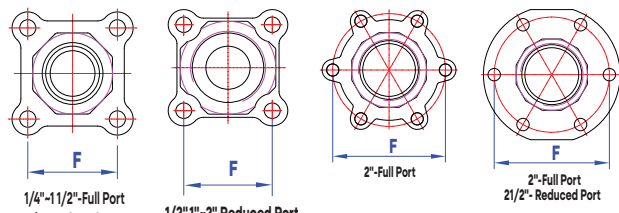
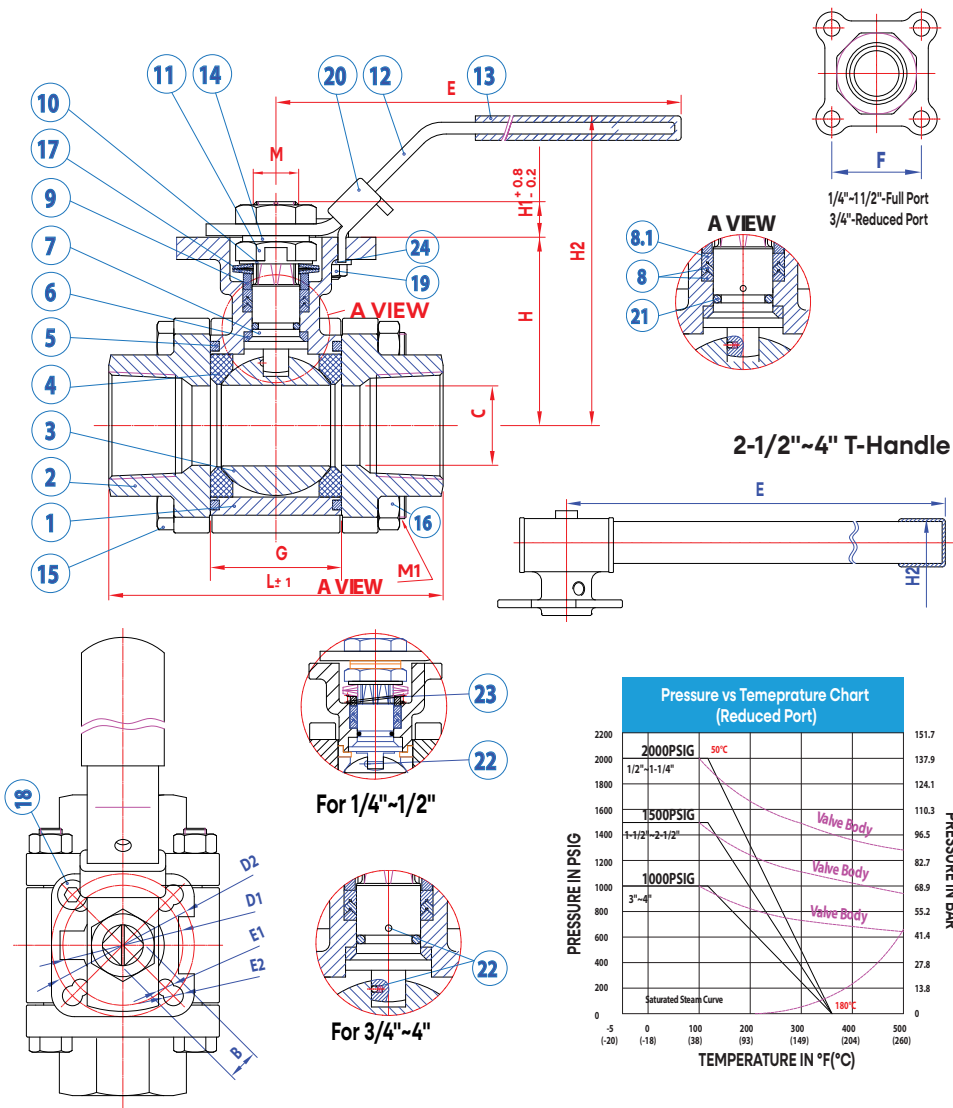
15mm

20mm

25mm

40mm

50mm



Material List

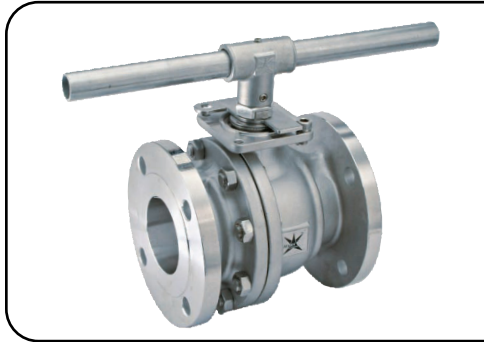
No.	Part Name	Qty	Material
1	BODY	1	CF8M/WCB
2	END CAP	2	CF8M*/WCB
3	BALL	1	SS316/CF8M
4	SEAT	2	PTFE/RPTFE
5	JOINT GASKET	2	PTFE
6	STEM SEAL	1	RTFE
7	STEM	1	ASTM A276 SS316
8	STEM PACKING	2	PTFE
8.1	STEM PACKING	1	25% GLASS FIBER FILLED +PTFE
9	GLAND	1	SS304
10	LOCK SADDLE	1	SS304
11	STEM NUT	2	SS304
12	HANDLE	1	SS304
13	HANDLE SLEEVE	1	VINYL
14	STEM WASHER	1	SS304
15	BOLT	*	SS304
16	BOLT NUT	*	SS304
17	BELLEVILLE WASHER	2	SS301
18	STOP PIN	1	SS304
19	PIN NUT	1	SS304
20	LOCKING DEVICE	1	SS304
21	O-RING	1	VITON
22	Anti-Static Device	@	SS316
23	SPRING	1	SS316
24	WASHER	1	SS304

Dimensions (mm)

SIZE	ØC		B		E		ØD1		ØD2		ØE1		ØE2		F		G		H		H1		H2		L		M1		M		ISO5211			
	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R		
1/4"	11.5	9			150		36		42		6		6		6		38.2		24.5		42.6		7.6		77		75		M6		7/16"-20UNF		F04/F05	
3/8"	12.6	9			150		36		42		6		6		6		38.2		24.5		42.6		7.6		77		75		M6		7/16"-20UNF		F04/F05	
1/2"	15	12.6	9	9	150	150	36	36	42	42	6	6	6	6	6	6	38.2	38.2	24.5	24.5	42.6	42.6	7.6	7.6	77	77	72.5	75	M6	M6	7/16"-20UNF	7/16"-20UNF	F04/F05	F04/F05
3/4"	20	15	9	9	182	150	36	36	42	42	6	6	6	6	6	44.3	38.2	31.4	24.5	46.85	42.6	8.6	7.6	82	77	85.4	72.5	M8	M6	7/16"-20UNF	7/16"-20UNF	F03/F04/F05	F04/F05	
1"	25	20	11	9	182	150	42	36	50	42	6	6	7	6	50	44.3	41.3	31.4	59.3	46.85	10.4	8.6	98.5	82	105.3	85.4	M8	M8	9/16"-18UNF	7/16"-20UNF	F05/F07	F03/F04/F05		
1-1/4"	32	25	11	11	182	182	42	42	50	50	6	6	7	7	57.2	50	48.4	41.3	62.6	59.3	10.4	10.4	102	98.5	111	105.3	M10	M8	9/16"-18UNF	9/16"-18UNF	F05/F07	F05/F07		
1-1/2"	38	32	14	11	215	182	50	42	70	50	7.5	6	9	7	66.6	57.2	56.3	48.4	79	62.6	13.4	10.4	128	102	127.3	111	M10	M10	3/4"-16UNF	9/16"-18UNF	F05/F07	F05/F07		
2"	50	38	14	14	215	215	50	50	70	70	7.5	7.5	9	9	114	66.6	71.4	56.3	87.7	79	13.4	13.4	137	128	127.3	111	M12	M10	3/4"-16UNF	3/4"-16UNF	F05/F07	F05/F07		
2-1/2"		50		14		215	50		70		7.5			9		114		71.4		87.7		13.4		137		142.8 +145		M12			3/4"-16UNF		F05/F07	

Dimension(mm)

SIZE	ØC		B		E		ØD1		ØD2		ØE1		ØE2		ØF		H		H1		H2		L		L1		M		M1		M2		M3		ISO5211	ISO5211		
	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R	F	R		
2-1/2"	65		17	19			300		70		102		10		12		139		108.7		16.8		167		185		86.6		M24		M14		86		92		F07/F10	
3"	80	65	17	19	17	19	370	300	70	70	102	102	10	10	12	12	160	139	117.7	108.7	17.8	16.8	176	167	205	185	99	86.6	M24	M24	M16	M14	100	100	107.3	107.3	F07/F10	F07/F10
4"	100	80	17	19	17	19	370	370	70	70	102	102	10	10	12	12	193	160	133.7	117.7	16.8	17.8	192	176	240	205	127	99	M24	M24	M16	M16	130.5	130.5	134.6	134.6	F07/F10	F07/F10

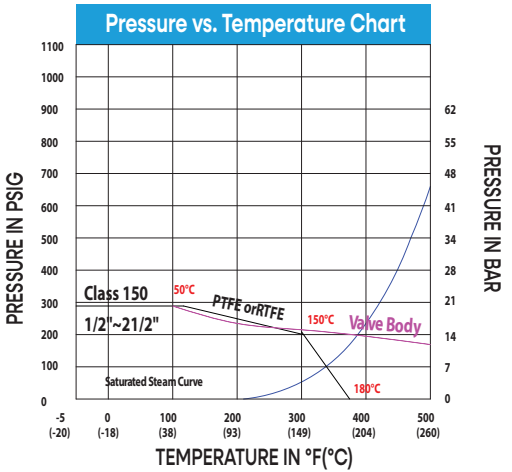
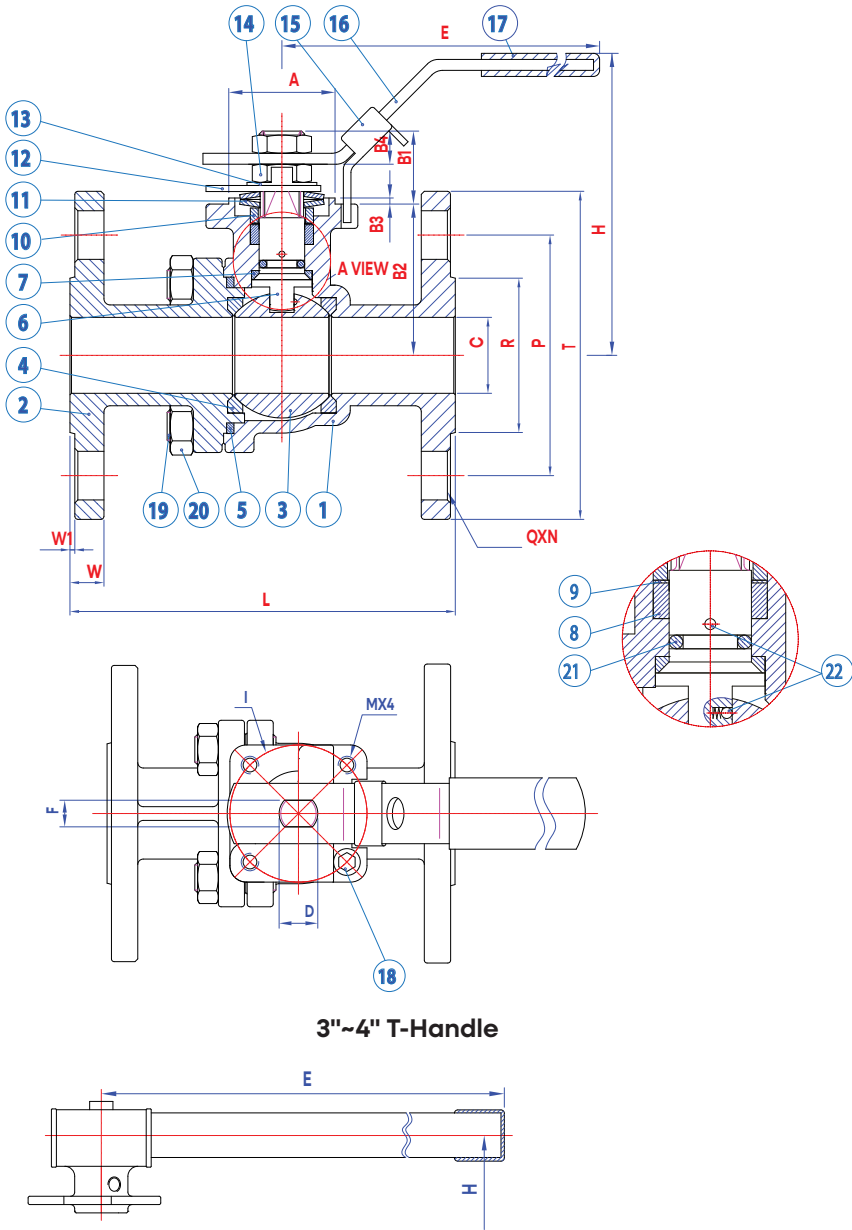


Series 90-1F

Core Catalogue

Body Types: CF8M, WCB	Construction: 2-Piece Body
Ball: 316 Stainless Steel	Bore Type: Full Bore
Seat: PTFE	Operation: Lever Operator
Rating: ANSI 150#	Connection Type: ANSI 150# Flanged & Drilled

Series 90-1F Stock Range	15mm	25mm	40mm	50mm	80mm	100mm
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No.	Part Name	Qty	Material
1	Body	1	ASTM A351 Gr.CF8M/ASTM A216 Gr.WCB
2	End cap	1	ASTM A351 Gr.CF8M/ASTM A216 Gr.WCB
3	Ball	1	CF8M
4	Seat	2	PTFE/RTFE
5	Joint gasket	1	SPIRAL WOUND SS316 WITH GRAPHITE
6	Stem	1	ASTM A276 SS316
7	Stem seal	1	RTFE
8	Stem packing	1	GRAPHITE
9	Stem packing	1	25% GLASS FIBER FILLED+PTFE
10	Gland	1	AISI 304
11	Belleville washer	2	AISI 301
12	Locking plate	1	AISI 304
13	Lock saddle	1	AISI 304
14	Stem nut	2	AISI 304
15	Locking device	1	AISI 304
16	Handle	1	AISI 304
17	Handle sleeve	1	VINYL
18	Stop pin	1	AISI 304
19	Bolt	*	ASTM A193 B8
20	Bolt nut	*	ASTM A194 8
21	O-ring	1	VITON
22	Anti-static Device	2	AISI 316

Dimensions (mm)

SIZE	ØA	B1	B2	B3	B4	ØC	ØD	E	F	H	ØI	L	M	N	ØP	ØQ	ØR	ØT	W	W1	ISO 5211
1/2"	30	23	34.5	1	9.2	15	11.1	170	8	80	42	108.3	M5(10-24UNC)	4	60.5	16	35.1	88.9	11.2	1.6	F04
3/4"	30	23	42	1	10.2	20	11.1	170	8	87	42	117.3	M5(10-24UNC)	4	69.9	16	42.9	98.6	11.2	1.6	F04
1"	35	23.5	49.8	2	8.1	25	14.3	207	9.7	103	50	127.1	M6(1/4"-20UNC)	4	79.2	16	50.8	108	11.2	1.6	F05
1-1/4"	35	23.5	55	2	8.1	32	14.3	207	9.7	108	50	139.7	M6(1/4"-20UNC)	4	88.9	16	63.5	117.3	12.7	1.6	F05
1-1/2"	55	34.8	78.3	2	14.8	38	19	261	12	153	70	165.1	M8(5/16"-18UNC)	4	98.6	16	73.2	127	14.3	1.6	F07
2"	55	34.8	86.4	2	14.8	50	19	261	12	162	70	178.3	M8(5/16"-18UNC)	4	120.7	19	91.9	152.4	15.9	1.6	F07
2-1/2"	55	34.8	97.4	2	14.8	65	19	261	12	173	70	190	M8(5/16"-18UNC)	4	139.7	19	104.6	177.8	17.6	1.6	FOR F07
3"	70	46	107.4	2	23.5	80	24	365	15	174.8	102	203.5	M10(3/8"-16UNC)	4	152.4	19	127	190.5	19	1.6	F10
4"	70	46	122.4	2	23.5	100	24	365	15	189.9	102	228.6	M10(3/8"-16UNC)	8	190.5	19	157.2	228.6	23.9	1.6	F10

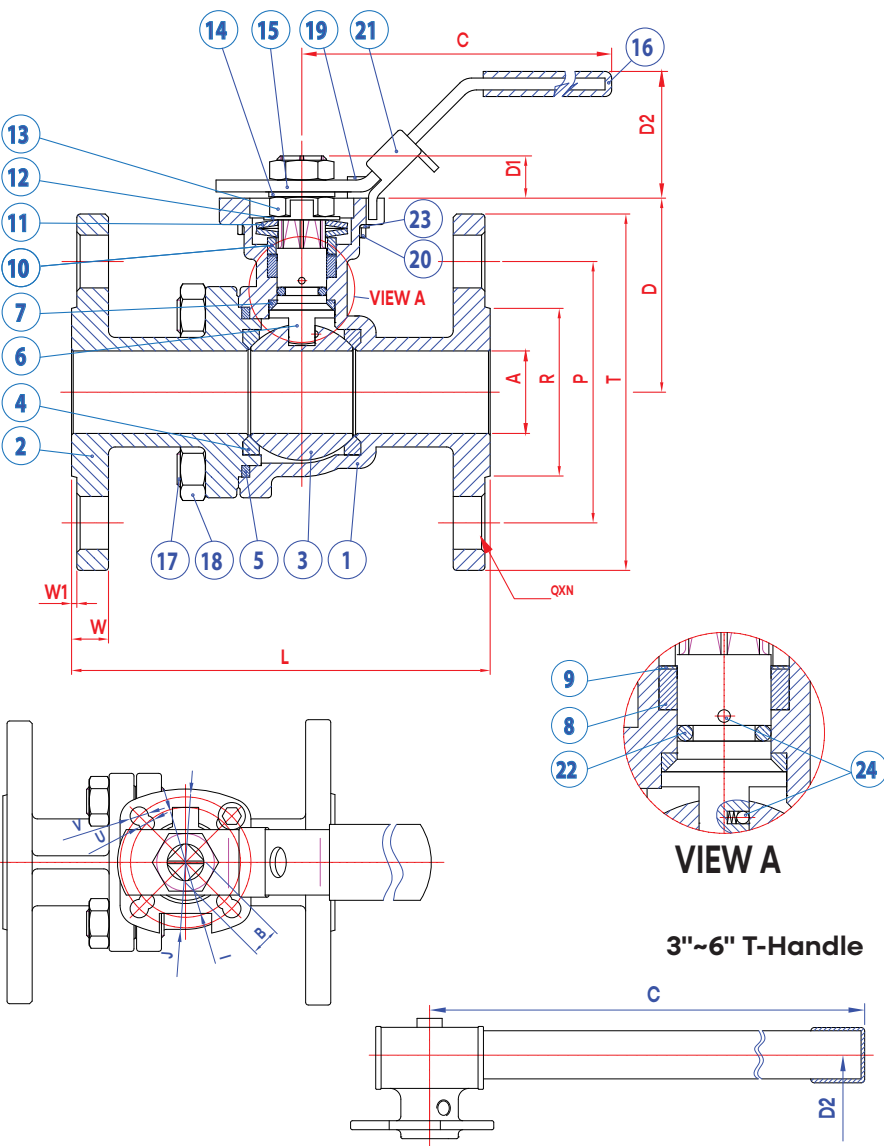


Series 90D-1F

Core Catalogue

Body Types: CF8M	Construction: 2-Piece Body
Ball: 316 Stainless Steel	Bore Type: Full Bore
Seat: PTFE	Operation: Lever Operator
Rating: ANSI 150#	Connection Type: ANSI 150# Flanged & Drilled

Series 90D-1F Stock Range	15mm	25mm	32mm	40mm	50mm	80mm	100mm	150mm
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No	Part Name	Qty	Materials
1	Body	1	CF8M/WCB
2	End Cap	1	CF8M/WCB
3	Ball	1	CF8M
4	Seat	2	RTFE
5	Joint Gasket	1	SPIRAL WOUND SS316 WITH GRAPHITE
6	Stem	1	SS316
7	STEM SEAL	1	RTFE
8	STEM PACKING	1	GRAPHITE
9	STEM PACKING	1	25% GLASS FIBER FILLED+PTFE
10	Gland	1	SS304
11	Belleville Washer	2	SS301
12	LOCK SADDLE	1	SS304
13	Stem Nut	2	SS304
14	Stem Washer	1	SS304
15	Handle	1	SS304
16	HANDLE SLEEVE	1	VINYL
17	Bolt	*	SS304
18	Bolt Nut	*	SS304
19	Stop Pin	1	SS304
20	Pin Nut	1	SS304
21	Locking Device	1	SS304
22	O-Ring	1	VITON
23	Washer	1	SS304
24	Anti-static Device	2	SS316

Dimensions (mm)

SIZE	ØA	B	C	D	D1	D2	ØI	ØJ	L	N	ØP	ØQ	ØR	ØT	W	W1	ØU	ØV	ISO5211
1/2"	15	11	165	46.7	99	36	42	50	108.3	4	60.5	16	35.1	88.9	11.2	1.6	6.5	7	F04/F05
3/4"	20	11	165	51.2	99	36	42	50	117.3	4	69.9	16	42.9	98.6	11.2	1.6	6.5	7	F04/F05
1"	25	11	165	58.8	10.3	36	42	50	127.1	4	79.2	16	50.8	108	11.2	1.6	6.5	7	F04/F05
1-1/4"	32	14	215	72.6	12.9	49	50	70	139.7	4	88.9	16	63.5	117.3	12.7	1.6	7.5	9	F05/F07
1-1/2"	38	17	19	262	89.1	19	58	70	165.1	4	98.6	16	73.2	127	14.3	1.6	10	12	F07/F10
2"	50	17	19	262	96.6	19	58	70	178.3	4	120.7	19	91.9	152.4	15.9	1.6	10	12	F07/F10
2-1/2"	65	17	19	262	116	19	58	70	190	4	139.7	19	104.6	177.8	17.6	1.6	10	12	F07/F10
3"	80	22	365	132.5	23	46.2	102	125	203.5	4	152.4	19	127	190.5	19	1.6	12	14	F10/F12
4"	100	22	365	157	23	46.2	102	125	228.6	8	190.5	19	157.2	228.6	23.9	1.6	12	14	F10/F12
6"	150	27	705	210.2	28.5	66.5	125	140	393.7	8	241.3	22.2	215.9	279.4	25.4	1.6	14	18	F12/F14



Series 90D-2F

Core Catalogue

Body Types: CF8M	Construction: 2-Piece Body
Ball: 316 Stainless Steel	Bore Type: Full Bore
Seat: PTFE, RPTFE	Operation: Lever Operator
Rating: ANSI 300#	Connection Type: ANSI 150# Flanged & Drilled

Series 90D-2F Stock Range

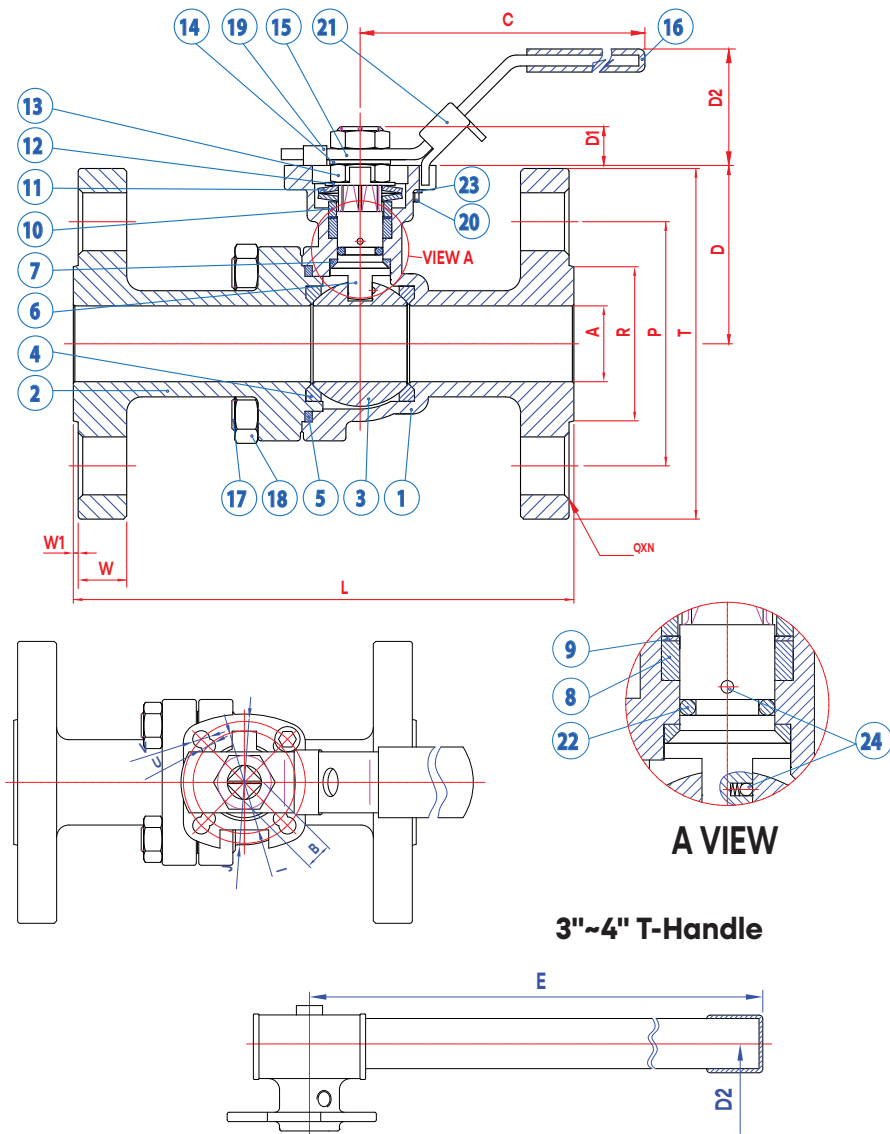
20mm

25mm

40mm

50mm

80mm



Material List			
No.	Part Name	Qty	Material
1	Body	1	CF8M/WCB
2	End Cap	1	CF8M/WCB
3	Ball	1	CF8M
4	Seat	2	PTFE/RTFE
5	Joint Gasket	1	SPIRAL WOUND SS316 WITH GRAPHITE
6	Stem	1	SS316
7	Stem seal	1	RTFE
8	Stem Packing	1	GRAPHITE
9	Stem Packing	1	25% GLASS FIBER FILLED+ PTFE
10	Gland	1	SS304
11	Belleville Washer	2	SS301
12	Lock saddle	1	SS304
13	Stem Nut	2	SS304
14	Stem Washer	1	SS304
15	Handle	1	SS304
16	Handle sleeve	1	VINYL
17	Bolt	*	SS304
18	Bolt Nut	*	SS304
19	Stop Pin	1	SS304
20	Pin Nut	1	SS304
21	Locking Device	1	SS304
22	O-Ring	1	VITON
23	Washer	1	SS304
24	Anti-static Device	2	SS316

Dimensions (mm)																		
SIZE	ØA	B	C	D	D1	D2	ØI	ØJ	L	N	ØP	ØQ	ØR	ØT	W	W1	ØU	ØV
1/2"	15	11	165	48.7	9.9	36	42	50	139.7	4	66.5	16	35.1	95.3	12.7	1.6	6.5	7
3/4"	20	11	165	63.5	10.3	36	42	50	152.4	4	82.6	19	42.9	117.3	14.2	1.6	6.5	7
1"	25	11	165	63.5	10.3	36	42	50	165.1	4	88.9	19	50.8	124	16.0	1.6	6.5	7
1-1/2"	38	17	19	262	89.1	19	58	70	190.5	4	114.3	22.2	73.2	155.4	19.0	1.6	10	12
2"	50	17	19	262	96.6	19	58	70	215.9	8	127	19	91.9	165.1	20.8	1.6	10	12
2-1/2"	65	17	19	262	116	19	58	70	241.3	8	149.4	22.2	104.6	190.5	23.8	1.6	10	12
3"	80	22	365	132.5	23	46.2	102	125	282.4	8	168.2	22.2	127	209.6	26.9	1.6	12	14
4"	100	22	365	157	23	46.2	102	125	304.8	8	200.2	22.2	157.2	254	30.2	1.6	12	14



Series 91D

Core Catalogue

Body Types: CF8M	Construction: 1-Piece Body
Ball: 316 Stainless Steel	Bore Type: Red Bore
Seat: PTFE	Operation: Lever Operator
Rating: ANSI 300#	Connection Type: ANSI 300# Flanged & Drilled

Series 91D Stock Range

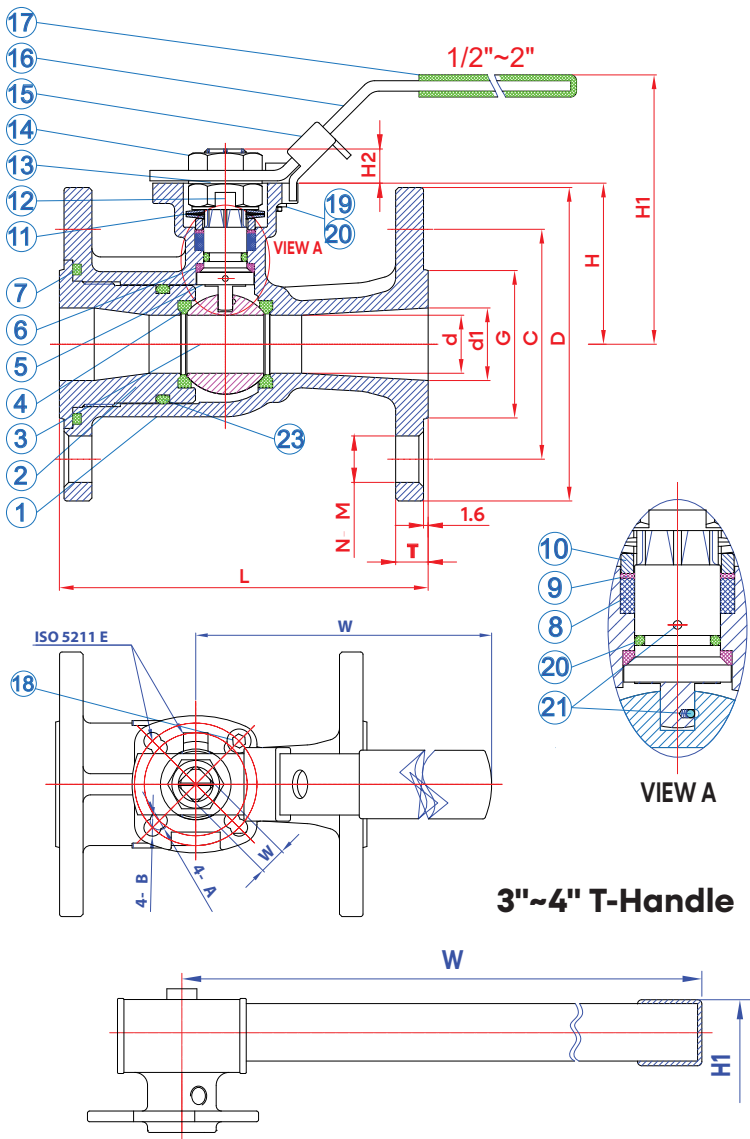
15mm

20mm

25mm

40mm

50mm

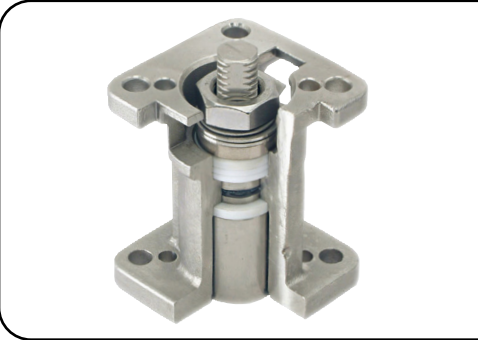


Test Pressure:

SHELL(BY WATER)		1125PSI
		80kg/cm ²
SEAT	BY WATER	825PSI
		58kg/cm ²
	BY AIR	85PSI
		6kg/cm ²

Material List			
No.	Part Name	Qty	Material
1	BODY	1	CF8M / WCB
2	END CAP	1	CF8M / WCB
3	BALL	1	CF8M
4	SEAT	2	RPTFE
5	STEM	1	SUS316
6	STEM SEAL	1	RPTFE
7	GASKET	1	316+GRAPHITE
8	STEM PACKING	1	GRAPHITE
9	STEM PACKING	1	25% Glass Fiber Filled+PTFE
10	GLAND	1	SUS304
11	BELLEVILLE WASHER	2	SUS301
12	LOCK SADDLE	1	SUS304
13	STEM WASHER	1	SUS304
14	STEM NUT	2	SUS304
15	LOCKING DEVICE	1	SUS304
16	HANDLE	1	SUS304
17	PLASTIC COVER	1	PLASTIC
18	STOP PIN	1	SUS304
19	WASHER	1	SUS304
20	PIN NUT	1	SUS304
21	O-RING	1	VITON
22	ANTI-STATIC DEVICE	2	SUS316
23	O-RING	1	VITON

Dimensions:																	
SIZE	d	d1	D	C	G	T	N-ØM	L	H	H1	H2	W	W1	ISO 5211	E	A	B
1/2"	12.7	15.0	95.3	66.5	35.1	14.3	4-Ø16	139.7	48.7	85	9.4	165	11	F04-F05	42-50	6.5	7.0
3/4"	16.0	20.0	117.3	82.6	42.9	15.8	4-Ø19	152.4	63.5	100	10.3	165	11	F04-F05	42-50	6.5	7.0
1"	20.0	25.0	124.0	88.9	50.8	17.6	4-Ø19	165.1	63.5	100	10.3	165	11	F04-F05	42-50	6.5	7.0
1 1/2"	32.0	38.0	155.4	114.3	73.2	20.6	4-Ø22.2	190.5	79.7	127	12.9	215	14	F05-F07	50-70	7.5	9.0
2"	38.0	50.0	165.1	127.0	91.9	22.4	8-Ø19	216.0	89.1	144	18.1	262	17/19	F07-F10	70-102	10.0	12.0
3"	65.0	80.0	209.6	168.2	127.0	28.5	8-Ø22.2	282.4	116.0	176	19	365	17/19	F07-F10	70-102	10.0	12.0
4"	80.0	100	254.0	200.2	157.2	31.8	8-Ø22.2	304.8	132.5	196	23	365	22	F10-F12	102-125	12.0	14.0

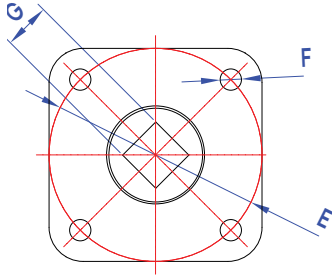
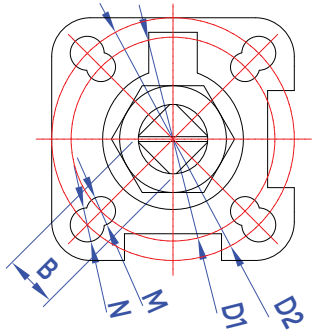
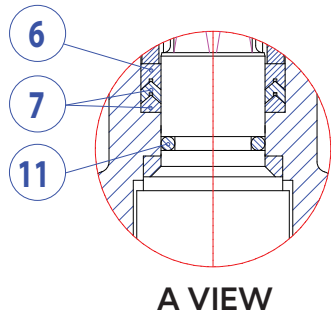
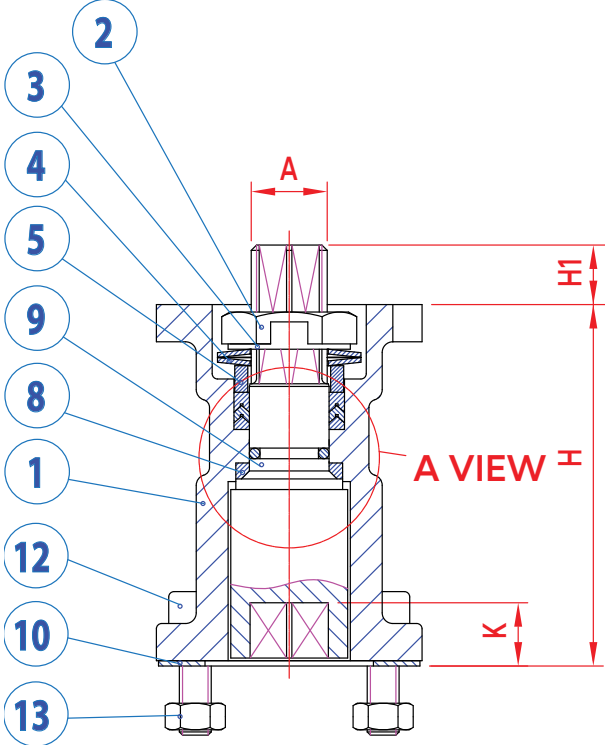


Mars TSM Units

Core Catalogue

The TSM unit, designed for applications with possible fugitive emissions, provides a secondary stem seal to prolong service life. It can also function as a stem extension for insulation.

TSM Stock Range	25mm/ 32mm	40mm/ 50mm	65mm/80mm/100mm
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Material List			
No.	Part Name	Qty	Material
1	Body	1	CF8M
2	Stem Nut	1	SS304
3	Stop Washer	1	SS304
4	Belleville Washer	2	SS301
5	Gland Bush	1	SS304
6	Gland Packing	1	25% GLASS FIBER FILLED +PTFE
7	Gland Packing	#	PTFE
8	Thrust Washer	1	RTFE
9	Stem	1	SS316
10	Joint Gasket	1	PTFE
11	O-Ring	1	VITON
12	Bolt	4	SS304
13	Bolt Nut	4	SS304

Dimensions (mm)														Model								
Type	A	B	ØD1	ØD2	ØE	ØF	G	H	K	H1	ØM	ØN	ISO5211	V22	V77	V88	V88A	V99	V33	V90D	V91D-10/20	
TSM-01	7/16"-20UNF	9	36	42	42	6.5	9	61.7	10.2	9	6	6	FOR F03 F04	1/4"-3/4"	1/4"-3/4"	1/4"-3/4"	1/4"-1/2"	1/2"-3/4"	1/4"-1/2"			
TSM-02	9/16"-18UNF	11	42	50	50	7.5	11	68	13.2	10.9	6	7	FOR F04 F05	1"-1-1/4"	1"-1-1/4"	1"-1-1/4"	1"-1-1/4"	1"-1-1/4"	3/4"-1"	1/2"-1"	1/2"-1"	
TSM-03	9/16"-18UNF	11	42	50	50	7.5	9	68	13.2	10.9	6	7	FOR F04 F05				3/4"					
TSM-04	3/4"-16UNF	14	50	70	70	9	14	87	17.2	13.9	7.5	9	FOR F05 F07	1-1/2"-2"	1-1/2"-2"	1-1/2"-2"	1-1/2"-2"	1-1/2"-2"				
TSM-05	M24XP3.0	17	70	102	102	12	17	106	20.2	16.8	10	12	FOR F07 F10	2-1/2"-3"	2-1/2"-4"	2-1/2"-4"		2-1/2"-4"	1-1/2"-2-1/2"	1-1/2"-2-1/2"	2"-3"	
TSM-10	M24XP3.0	19	70	102	102	12	19	106	20.2	16.8	10	12	FOR F07 F10				2-1/2"-4"					
TSM-12	M30XP3.5	22	102	125	102	12	22	125	25	23	12	14	FOR F10 F12						3"-4"	3"-4"	4"	
TSM-14	M36XP4.0	27	125	140	125	14	27	150	30.7	28.5	14	18	FOR F12 F14							5"-6"	6"	
TSM-15	M18XP2.5	14	50	70	70	9	14	87	17.2	13.9	7.5	9	FOR F05 F07						1-1/4"	1-1/4"	1-1/2"	



Mars Ball Valves - Extended Catalogue

For specialised applications beyond the core range, the John Valves Extended Catalogue introduces Mars Series 22, 30M, 33, 77SN, 88SN, and 99.

These valves expand the selection with additional sizes, materials, end connections, and seat options—ideal for automation and tailored service conditions. While not held in local stock, they are available to order and supported by John Valves’ technical team to ensure correct specification and seamless integration into your projects.

Backed by Mars’ global manufacturing expertise and John Valves’ local engineering support, the extended range provides reliable solutions when your application demands more.



Series 22



Series 30M



Series 33



Series 77SN



Series 88SN

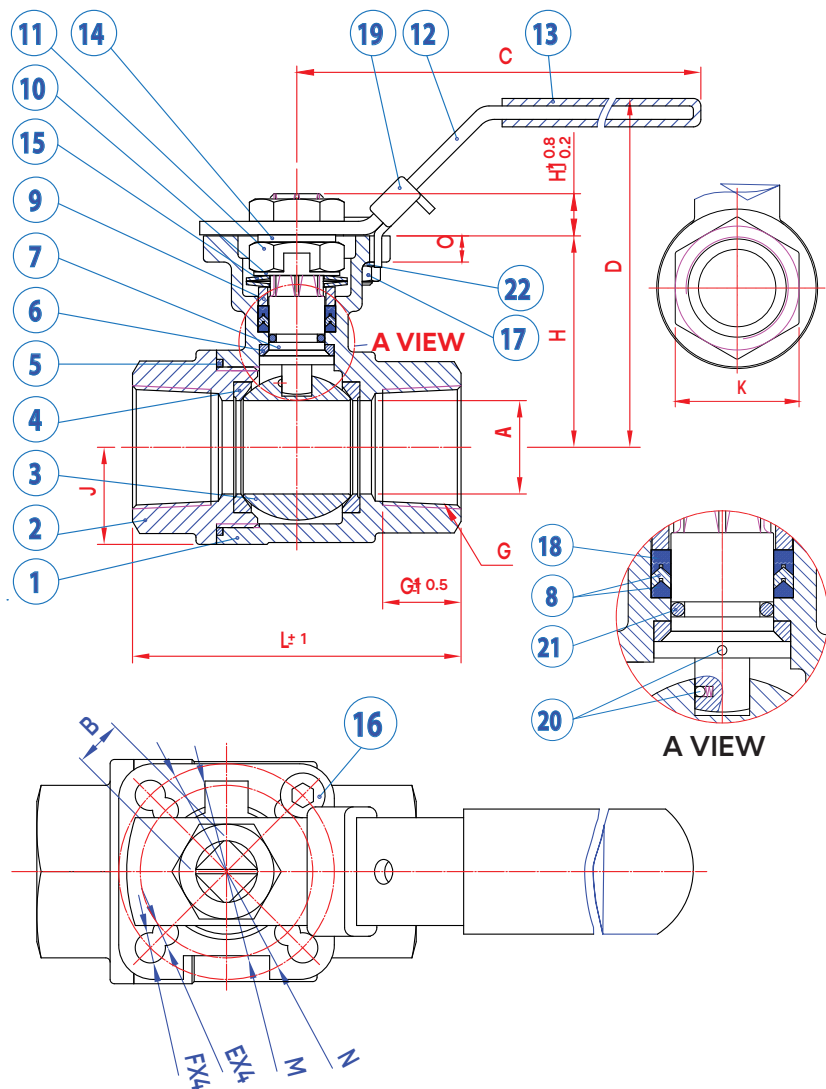


Series 99



Series 22		Extended Catalogue
Body Types: CF8M	Construction: 2-Piece Body	
Ball: 316 Stainless Steel	Bore Type: Full Bore	
Seat: RPTFE	Operation: Lever Operator	
Rating: 1000 PSI	Connection Type: BSPP	

Series 22 Product Range Overview



Material List			
No.	Part Name	Qty	Material
1	BODY	1	CF8M/1.4408
2	END CAP	1	CF8M/1.4408
3	BALL	1	SS316/CF8M
4	SEAT	2	PTFE/RTFE
5	JOINT GASKET	1	PTFE
6	STEM SEAL	1	RTFE
7	STEM	1	ASTM A276 SS316
8	STEM PACKING	*	PTFE
9	GLAND	1	AISI 304
10	LOCK SADDLE	1	AISI 304
11	STEM NUT	2	AISI 304
12	HANDLE	1	AISI 304
13	HANDLE SLEEVE	1	VINYL
14	STEM WASHER	1	AISI 304
15	BELLEVILLE WASHER	2	AISI 301
16	STOP PIN	1	AISI 304
17	PIN NUT	1	AISI 304
18	STEM PACKING	1	25% GLASS FIBER FILLED+PTFE
19	LOCKING DEVICE	1	AISI 304
20	Antistatic Device	2	AISI 316
21	O-RING	1	VITON
22	Washer	1	AISI 304

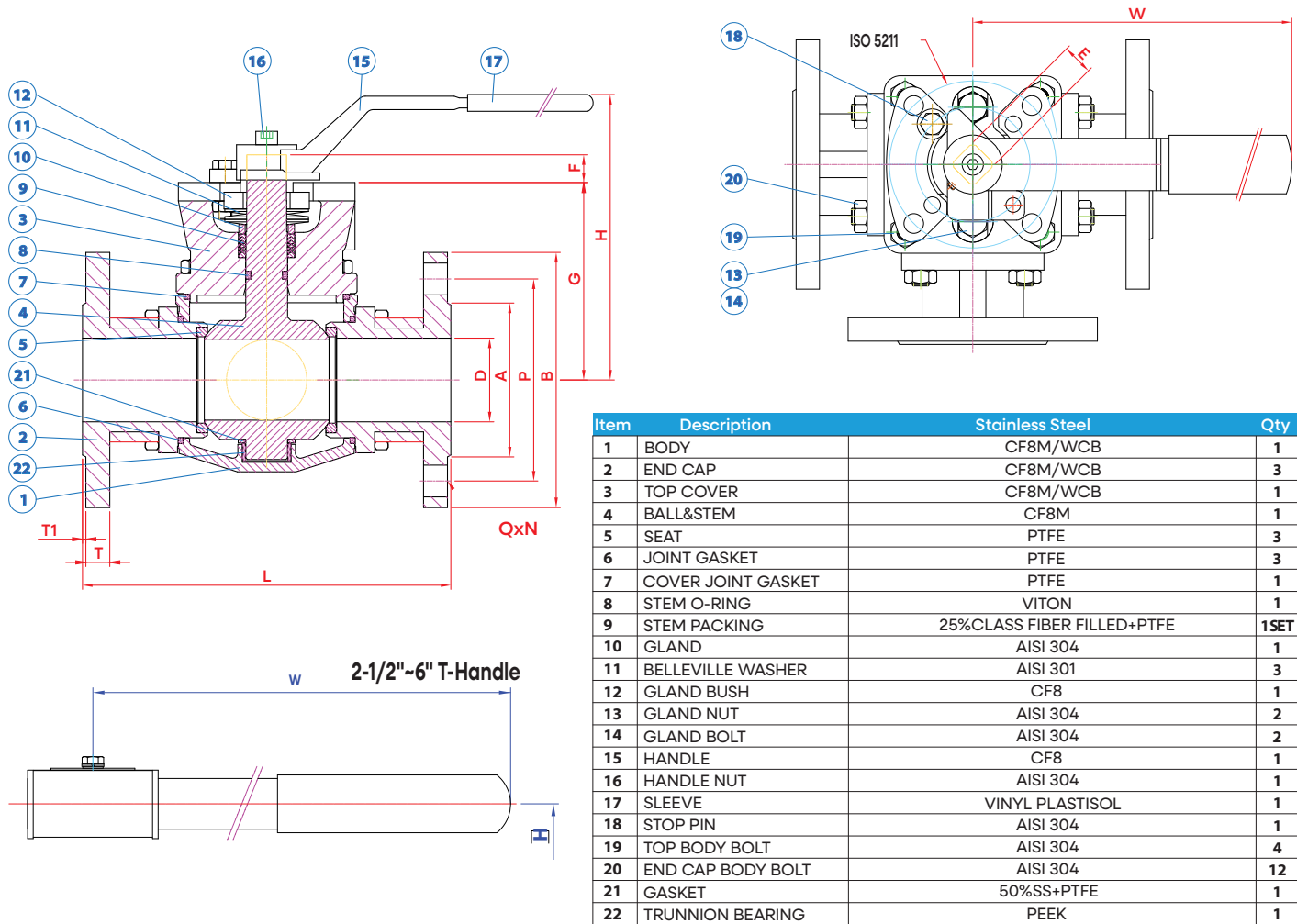
Dimensions (mm)

SIZE	ØA	B	C	C1	D	D1	ØE	ØF	G	G1	H	H1	J	K	L	ØM	ØN	O	ISO5211
1/4"	11.5	9	139		74		6	6	1/4" NPTor BSP	15	38.6	6.6	18.5	26	65	36	42	5	F03/F04 F03/F04/F05
3/8"	12.5	9	139		74		6	6	3/8" NPTor BSP	15	38.6	6.6	18.5	26	65	36	42	5	F03/F04 F03/F04/F05
1/2"	15	9	139		74		6	6	1/2" NPTor BSP	16	38.6	6.6	18.5	26	65	36	42	5	F03/F04 F03/F04/F05
3/4"	20	9	139		82		6	6	3/4" NPTor BSP	17	46.1	7.1	21.5	32	74.6	36	42	5	F03/F04 F03/F04/F05
1"	25	11	165		96		6.5	7	1" NPTor BSP	21	56.6	10.9	26	40	88	42	50	7	FO4/FO5
1-1/4"	32	11	165		100		6.5	7	1-1/4" NPTor BSP	22	61	10.9	31.5	49	102	42	50	7	FO4/FO5
1-1/2"	38	14	215		127		7.5	9	1-1/2" NPTor BSP	22.5	77.5	13.9	36.5	56	110	50	70	10	FO5/FO7
2"	50	14	215		134		7.5	9	2" NPTor BSP	26	85.2	13.9	45.4	70	125	50	70	10	FO5/FO7
2-1/2"	65	17	263	303	167	166.4	10	12	2-1/2" NPTor BSP	31	108.7	16.8	59.3	87	160.6	70	102	10	FO7/F10
3"	80	17	313	373	175	175.1	10	12	3" NPTor BSP	34	117.4	18.1	69.8	104	178	70	102	10	FO7/F10



Series 30M		Extended Catalogue
Body Types: CF8M	Construction: 5-Piece Body	
Ball: 316 Stainless Steel	Bore Type: Full Bore	
Seat: RPTFE	Operation: Lever Operator	
Rating: 150#/300#	Connection Type: ANSI 150#/300# Flanged & Drilled	

Series 30M Product Range Overview



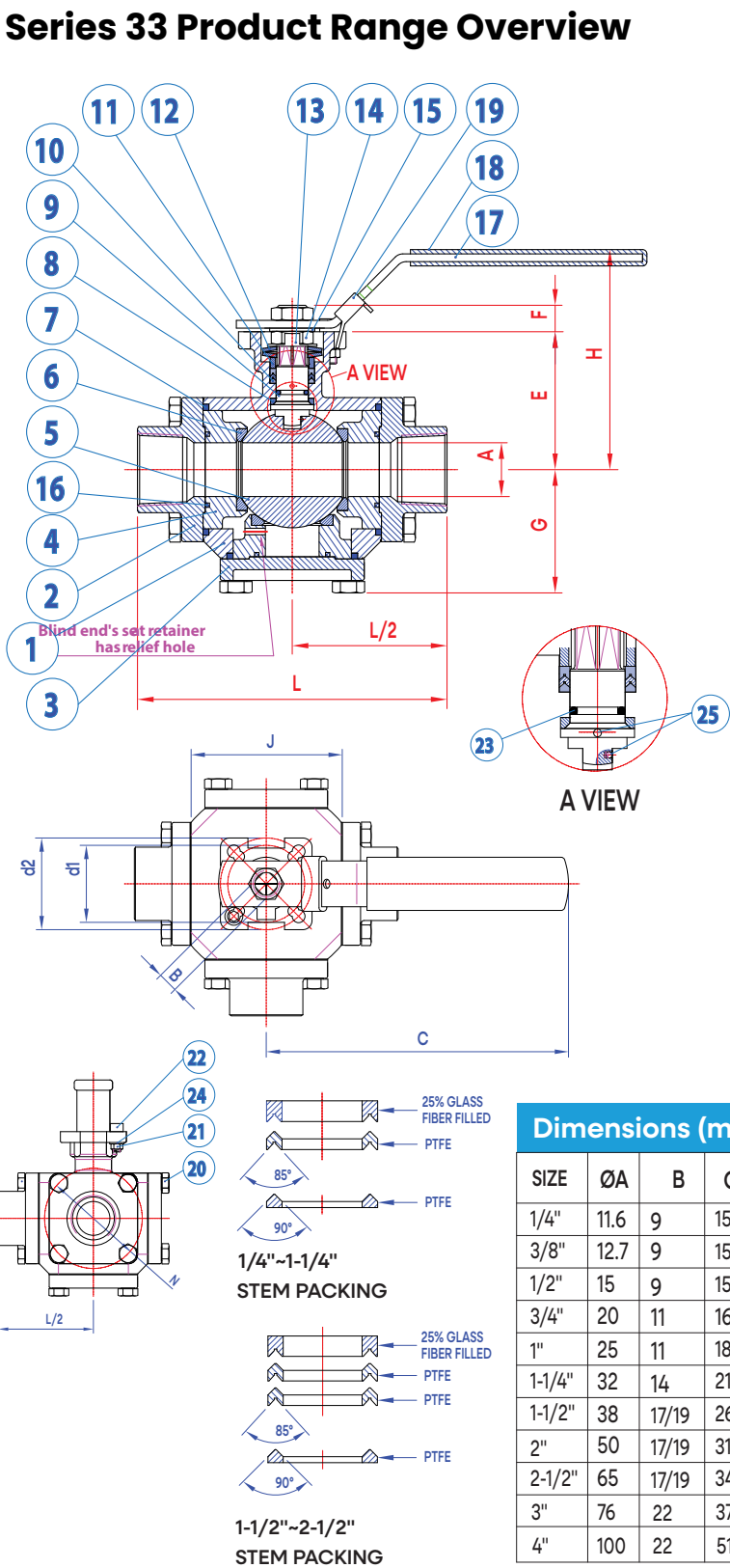
Item	Description	Stainless Steel	Qty
1	BODY	CF8M/WCB	1
2	END CAP	CF8M/WCB	3
3	TOP COVER	CF8M/WCB	1
4	BALL&STEM	CF8M	1
5	SEAT	PTFE	3
6	JOINT GASKET	PTFE	3
7	COVER JOINT GASKET	PTFE	1
8	STEM O-RING	VITON	1
9	STEM PACKING	25%CLASS FIBER FILLED+PTFE	1SET
10	GLAND	AISI 304	1
11	BELLEVILLE WASHER	AISI 301	3
12	GLAND BUSH	CF8	1
13	GLAND NUT	AISI 304	2
14	GLAND BOLT	AISI 304	2
15	HANDLE	CF8	1
16	HANDLE NUT	AISI 304	1
17	SLEEVE	VINYL PLASTISOL	1
18	STOP PIN	AISI 304	1
19	TOP BODY BOLT	AISI 304	4
20	END CAP BODY BOLT	AISI 304	12
21	GASKET	50%SS+PTFE	1
22	TRUNNION BEARING	PEEK	1

	SIZE		ØD	L	T	T1	F	G	H	W	E	ØA	ØB	ØQ	N	ØP	ISO 5211
	NPS	DN															
CLASS 150	1 1/2	40	40	183	12.7	1.5	18.7	105.3	156.7	262	19	73	127	16	4	98.6	F07-F10
	2	50	50	220	14.2		18.9	113	164.7			91.9	152	19		120.6	
CLASS 300	1 1/2	40	40	219	19	1.5	18.7	105.3	156.7	262	19	73	155	22.2	8	114.3	F07-F10
	2	50	50	238	20.6		18.9	113	164.7			91.9	165	19		127	
	SIZE		ØD	L	T	T1	F	G	H	W	E	ØA	ØB	ØQ	N	ØP	ISO 5211
	NPS	DN															
CLASS 150	2 1/2	65	66	281	15.7	1.5	21.2	136.3	180	365	22	104.6	178	19	4	139.7	F10-F12
	3	80	76	285	17.5		22.2	145.7	189	505		127	190			152.4	
	4	100	101	348	22.4		30	190	247	705	27	157.2	229	22.2	8	190.5	F12-F14
CLASS 300	2 1/2	65	66	285	23.9	1.5	21.2	136.3	180	365	22	104.6	190			149.4	F10-F12
	3	80	76	301	26.9		22.2	145.7	189	505		127	210			168.1	
	4	100	101	390	30.2		30	190	247	705	27	157.2	254	22.2	8	200.2	F12-F14
	SIZE		ØD	L	T	T1	F	G	H	W	E	ØA	ØB	ØQ	N	ØP	ISO 5211
	NPS	DN															
CLASS 150	6	150	150	480	23.9	1.5	36.5	250	308	955	36	215.9	279	22.2	8	241.3	F14-F16
CLASS 300					35.1								318			269.7	



Series 33		Extended Catalogue
Body Types: CF8M	Construction: 6-Piece Body	
Ball: 316 Stainless Steel	Bore Type: Full Bore	
Seat: RPTFE	Operation: Lever Operator	
Rating: 1000/800/600/300 PSI	Connection Type: BSPP, SW, BW	

Series 33 Product Range Overview



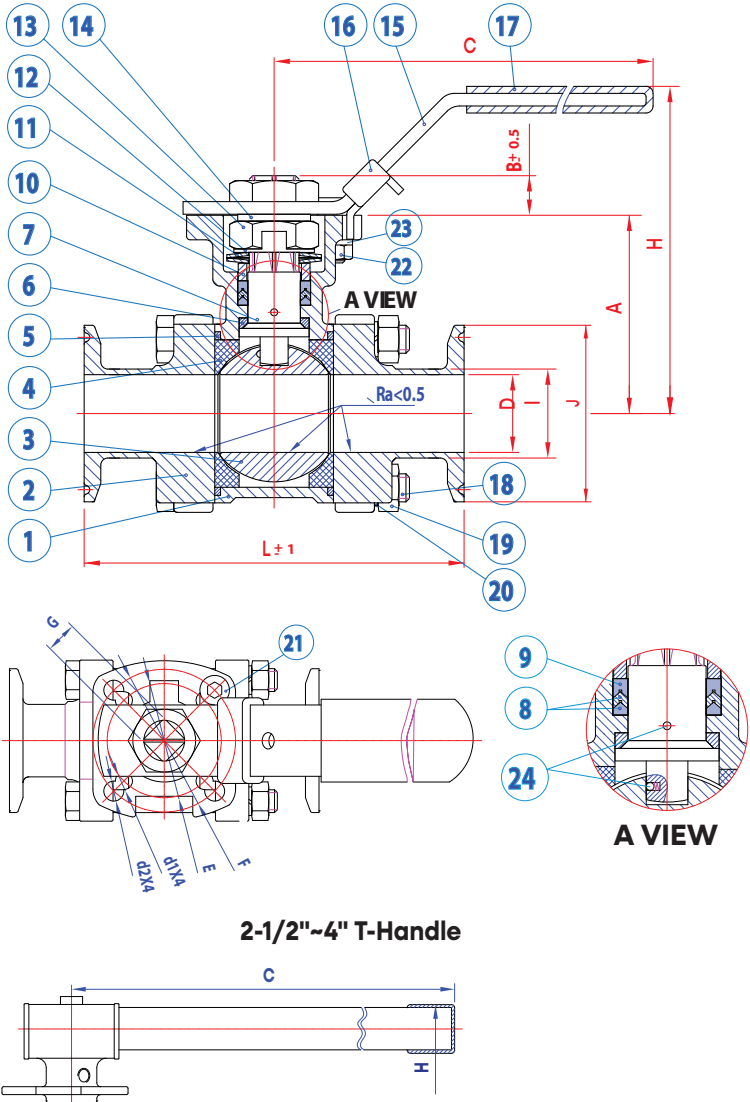
Material List			
No.	Part Name	Qty	Material
1	BODY	1	ASTM A351 Gr.CF8M/ASTM A216 Gr. WCB
2	END CAP	3	ASTM A351 Gr.CF8M/ASTM A216 Gr. WCB
3	Blind end	2	ASTM A351 Gr.CF8M/ASTM A216 Gr. WCB
4	SEAT RETAINER	5	ASTM A351 Gr.CF8M/ASTM A216 Gr. WCB
5	BALL	1	SS316/CF8M
6	SEAT	5	RTFE
7	JOINT GASKET	5	PTFE
8	STEM SEAL	1	RPTFE
9	STEM	1	ASTM A276 SS316
10	STEM PACKING	1SET	25% GLASS FIBER FILLED+PTFE
11	GLAND	1	AISI 304
12	BELLEVILLE WASHER	2	AISI 301
13	LOCK SADDLE	1	AISI 304
14	STEM NUT	2	AISI 304
15	STEM WASHER	1	AISI 304
16	RETAINER SEAL	5	PTFE
17	HANDLE	1	AISI 304
18	HANDLE SLEEVE	1	VINYL
19	LOCKING DEVICE	1	AISI 304
20	BOLT NUT	20	AISI 304
21	PIN NUT	1	AISI 304
22	STOP PIN	1	AISI 304
23	O-RING	1	VITON
24	WASHER	1	AISI 304
25	Antistatic Device	2	AISI 316

Dimensions (mm)																
SIZE	ØA	B	C	E	F	G	H	J	L	M	ØN	Ød1	Ød2	ISO 5211		
1/4"	11.6	9	150	43.9	9	35.1	85	50.6	92	M6	45	36	42	F03/F04/F05		
3/8"	12.7	9	150	43.9	9	35.1	85	50.6	92	M6	45	36	42	F03/F04/F05		
1/2"	15	9	150	43.9	9	35.1	85	50.6	92	M6	45	36	42	F03/F04/F05		
3/4"	20	11	165	54.2	10.5	45.3	93	67	110	M6	59	42	50	F04/F05		
1"	25	11	180	64.1	10.5	56.8	108	83	144	M8	74	42	50	F04/F05/F07		
1-1/4"	32	14	215	78.5	13	59.8	127	89	146	M8	83	50	70	F05/F07		
1-1/2"	38	17/19	263	94.9	18	72.3	152	109	164	M10	101	70	102	F07/F10		
2"	50	17/19	313	101.6	18	80.5	159	121	184	M12	116	70	102	F07/F10		
2-1/2"	65	17/19	344	120	18	96.8	177	146	228	M14	142	70	102	F07/F10		
3"	76	22	370	132.9	23	105	195	158	265	M16	160	102	125	F10/F12		
4"	100	22	510	164	23	131.5	226	209	317	M20	206	102	125	F10/F12		



Series 77SN		Extended Catalogue
Body Types: CF3M	Construction: 3-Piece Body	
Ball: 316L/CF3M	Bore Type: Full Bore	
Seat: PTFE	Operation: Lever Operator	
Rating: 1000/800 PSI	Connection Type: T- Clamp	

Series 77SN Product Range Overview



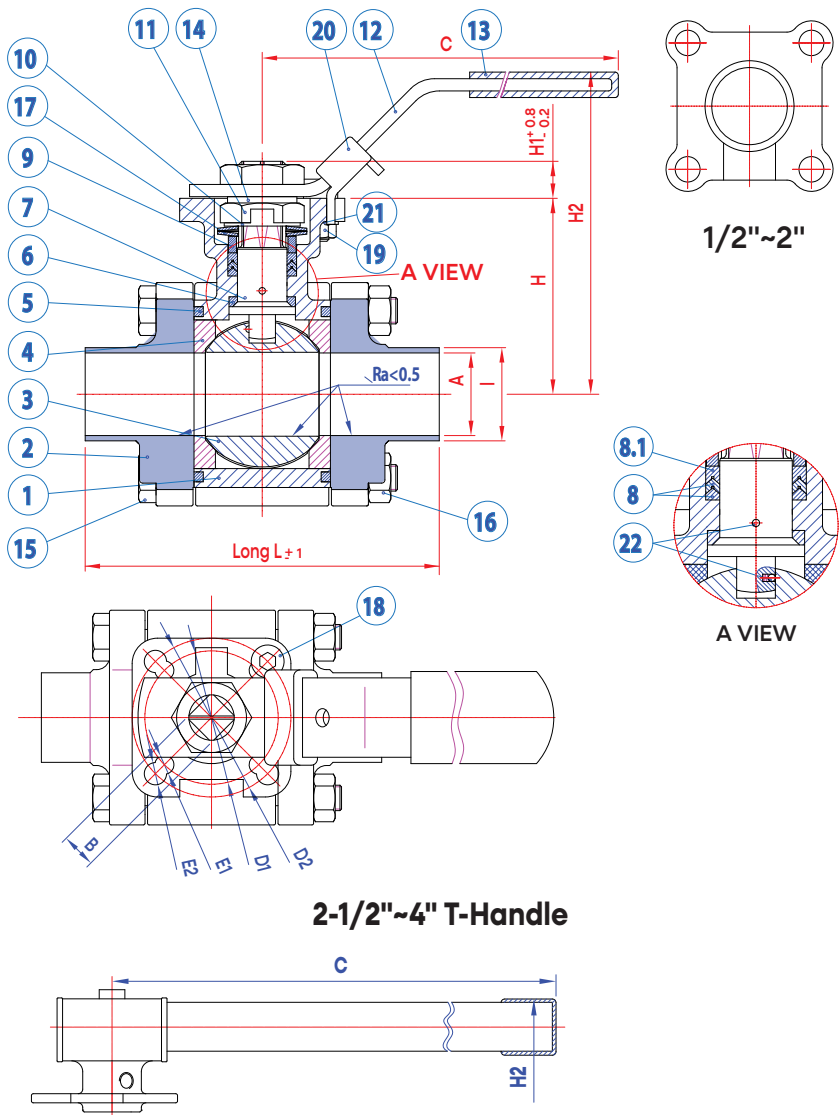
Material List			
No.	Part Name	Qty	Material
1	BODY	1	ASTM A351 Gr. CF3M
2	END CAP	2	ASTM A351 Gr. CF3M
3	BALL	1	SS316L/CF3M
4	SEAT	2	PTFE
5	JOINT GASKET	2	PTFE
6	STEM SEAL	1	PTFE
7	STEM	1	A276 SS316L
8	STEM PACKING	2	PTFE
9	STEM PACKING	1	25% GLASS FIBER FILLED+PTFE
10	GLAND	1	AISI 304
11	BELLEVILLE WASHER	2	AISI 301
12	LOCK SADDLE	1	AISI 304
13	STEM NUT	2	AISI 304
14	STEM WASHER	1	AISI 304
15	HANDLE	1	AISI 304
16	LOCKING DEVICE	1	AISI 304
17	HANDLE SLEEVE	1	VINYL
18	BOLT	4	ASTM A193 B8
19	BOLT NUT	4	ASTM A194 8
20	BOLT WASHER	4	AISI 304
21	STOP PIN	1	AISI 304
22	PIN NUT	1	AISI 304
23	WASHER	1	AISI 304
24	Anti-static Device	2	AISI 316

Dimensions (mm)																
SIZE	ØD	ØI	ØJ	A	B	C	ØE	ØF	G	L	H	ØK	Ød1	Ød2	ISO5211	
1/2"	9.4	12.7	25.2	42.1	6.1	139	36	42	9	89.1	77	46	6	6	F03/F04	
3/4"	15.75	19	25.2	48	6.6	139	36	42	9	101.6	83	52	6	6	F03/F04	
1"	22.2	25.4	50.4	56.6	10.9	165	42	50	11	114.5	96	60	6	7	F04/F05	
1-1/2"	34.9	38.1	50.5	77.5	13.9	215	50	70	14	140.1	127	85.5	7.5	9	F05/F07	
2"	47.5	50.8	63.9	85.2	13.9	215	50	70	14	159	134	103.8	7.5	9	F05/F07	
2-1/2"	60.3	63.5	77.4	108.7	16.8	300	70	102	17	174	167	130	10	12	F07/F10	
3"	73	76.2	90.9	117.7	17.8	370	70	102	17	193.2	176	155.5	10	12	F07/F10	
4"	97.4	101.6	118.9	132.55	16.8	370	70	102	17	226	192	188	10	12	F07/F10	



Series 88SN		Extended Catalogue
Body Types: CF3M	Construction: 3-Piece Body	
Ball: 316L/CF3M	Bore Type: Full Bore	
Seat: PTFE	Operation: Lever Operator	
Rating: 1000/800 PSI	Connection Type: OD Tube	

Series 88SN Product Range Overview



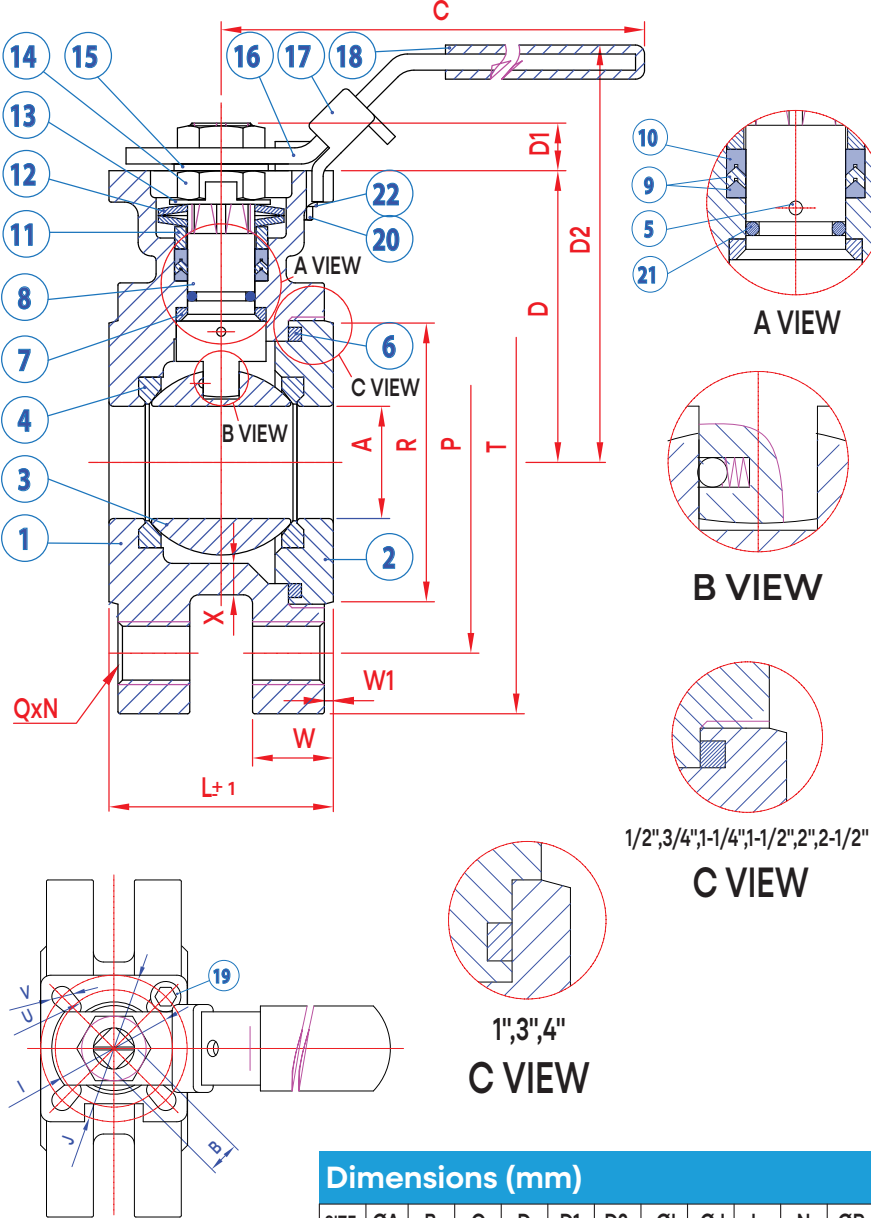
Material List			
No.	Part Name	Qty	Material
1	BODY	1	CF3M
2	END CAP	2	CF3M
3	BALL	1	SS316L/CF3M
4	SEAT	2	PTFE
5	JOINT GASKET	2	PTFE
6	STEM SEAL	1	PTFE
7	STEM	1	SS316L
8	STEM PACKING	2	PTFE
8.1	STEM PACKING	1	25% GLASS FIBER FILLED +PTFE
9	GLAND	1	SS304
10	LOCK SADDLE	1	SS304
11	STEM NUT	2	SS304
12	HANDLE	1	SS304
13	HANDLE SLEEVE	1	VINYL
14	STEM WASHER	1	SS304
15	BOLT	4	SS304
16	BOLT NUT	4	SS304
17	BELLEVILLE WASHER	2	SS301
18	STOP PIN	1	SS304
19	PIN NUT	1	SS304
20	LOCKING DEVICE	1	SS304
21	WASHER	1	SS304
22	Anti-static Device	2	SS316

Dimensions (mm)													
SIZE	ØA	ØI	B	C	ØD1	ØD2	ØE1	ØE2	H	H1	H2	L	ISO5211
1/2"	9.4	12.7	9	139	36	42	6	6	42.6	7.6	77	134.5	F03/F04
3/4"	15.75	19	9	139	36	42	6	6	42.6	7.6	77	140.9	F03/F04
1"	22.2	25.4	9	139	36	42	6	6	46.85	8.6	82	161.5	F03/F04
1-1/2"	34.9	38.1	11	165	42	50	6	7	62.6	10.4	102	182.2	F04/F05
2"	47.5	50.8	14	215	50	70	7	9	84.7	14.55	134	191.7	F05/F07
2-1/2"	60.3	63.5	17	300	70	102	10	12	108.7	17.1	167	247.6	F07/F10
3"	73	76.2	17	370	70	102	10	12	117.7	18.1	176	266.8	F07/F10
4"	97.4	101.6	17	370	70	102	10	12	132.55	17.1	192	317.6	F07/F10



Series 99		Extended Catalogue
Body Types: CF8M	Construction: 1-Piece Body	
Ball: 316 Stainless Steel	Bore Type: Full Bore	
Seat: RPTFE	Operation: Lever Operator	
Rating: 150#	Connection Type: ANSI 150# Flanged & Drilled	

Series 99 Product Range Overview



Material List			
No.	Part Name	Qty.	Material
1	Body	1	CF8M/WCB
2	End cap	1	CF8M/WCB
3	Ball	1	SS316/CF8M
4	Seat	2	PTFE/RTFE
5	Anti-static Device	2	SS316
6	Joint gasket	1	PTFE
7	Stem seal	1	RTFE
8	Stem	1	SS316
9	Stem packing	*	PTFE
10	Stem packing	1	25% GLASS FIBER FILLED+PTFE
11	Gland bush	1	SS304
12	Belleville washer	2	SS301
13	Lock saddle	1	SS304
14	Stem nut	2	SS304
15	Stem washer	1	SS304
16	Handle	1	SS304
17	Locking device	1	SS304
18	Handle sleeve	1	VINYL
19	Stop pin	1	SS304
20	Pin nut	1	SS304
21	O-ring	1	VITON
22	Washer	1	SS304

Dimensions (mm)																						
SIZE	ØA	B	C	D	D1	D2	ØI	ØJ	L	N	ØP	Q	ØR	ØT	W	W1	ØU	ØV	X	ISO5211		
DN15	15	9	139	48.7	7	85	36	42	40.8	4	60.5	1/2-13UNC	35.1	88.9	11.2	1.6	6	6	7.7	F03/F04		
DN20	20	9	139	53.7	8	90	36	42	44	4	69.9	1/2-13UNC	42.9	98.6	11.2	1.6	6	6	9	F03/F04		
DN25	25	11	165	65	12	104	42	50	50	4	79.2	1/2-13UNC	64	108	11.2	1.6	6	7	7	F04/F05		
DN32	32	11	165	77	11.3	116	42	50	60	4	88.9	1/2-13UNC	63.5	117.3	12.7	1.6	6	7	7	F04/F05		
DN40	38	14	215	85.5	15.5	135	50	70	65	4	98.6	1/2-13UNC	73.2	127	14.3	1.6	7.5	9	6	F05/F07		
DN50	50	14	215	93	16	142	50	70	80	4	120.7	5/8-11UNC	91.9	152.4	15.9	1.6	7.5	9	6	F05/F07		
DN65	65	17	263	109.7	15.8	168	70	102	110	4	139.7	5/8-11UNC	104.6	177.8	17.6	1.6	10	12	8	F07/F10		
DN80	80	17	313	119.5	16	178	70	102	120	4	152.4	5/8-11UNC	127	190.5	19	1.6	10	12	9	F07/F10		
DN100	100	17	344	132.7	17.8	191	70	102	150	8	190.5	5/8-11UNC	157.2	228.6	23.9	1.6	10	12	9.2	F07/F10		

NOTES

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JOHN VALVES[®]

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of Mars Valves

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