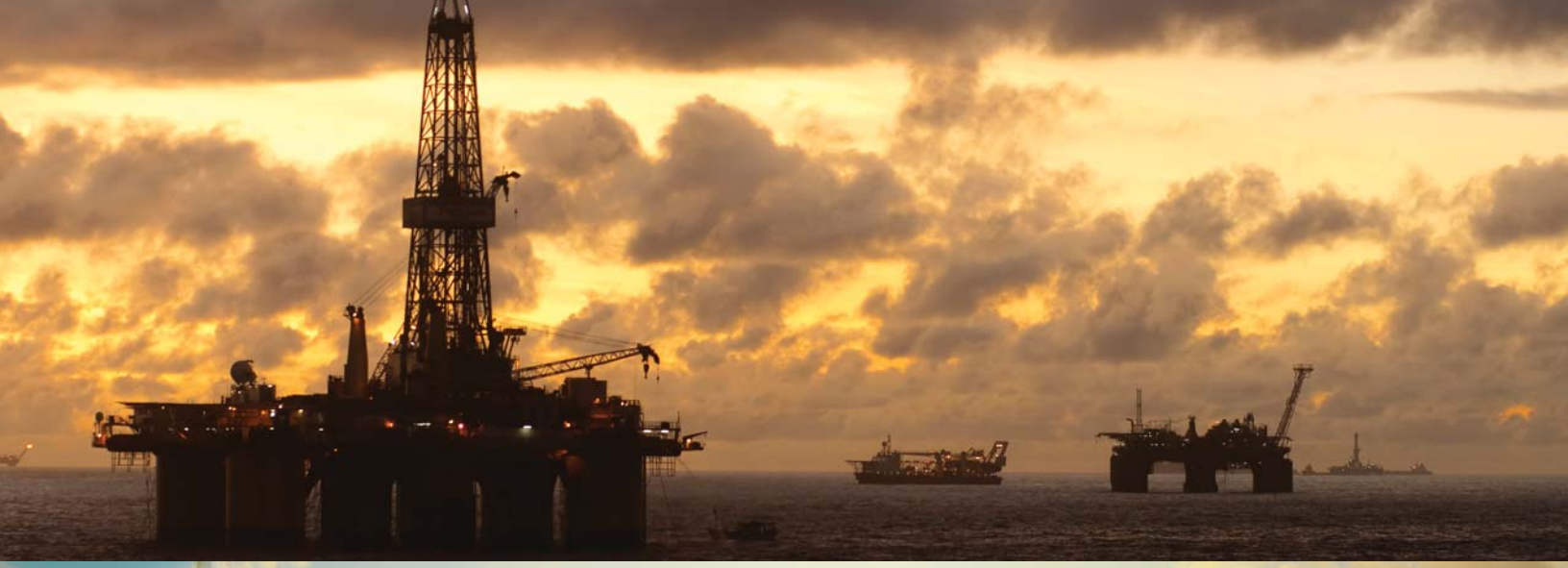




Product Guide

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS



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Additional products & services

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Product Catalogues

M.A. Stewart & Sons has a wide selection of products available. Ask us about other valves, fittings and automation, or check on line at: www.mastewart.com

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VALVES AND FITTINGS

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Carbon & Stainless Steel: Gate, Globe, Check & Ball valves – low emission. Bronze, Brass, Cast Iron: Gate, Globe, Check, Ball & Butterfly valves.



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BERIC

Carbon & Forged Steel Gate, Globe & Check Valves.



BONNEY FORGE

Forged Steel: Gate, Globe, Check & Trunnion Valves. Carbon & Stainless Steel: Gate, Globe & Check Valves.

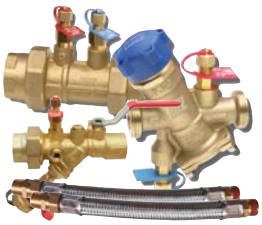


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Demco Resilient Seated Butterfly Valves

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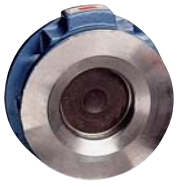
RED-WHITE
TOYO

Bronze & Brass: Gate, Globe, Check, Radiator, Y Strainers & Ball valves. Cast Iron: Gate, Globe, Check & Y Strainers.



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American Valve: Cast Iron, Ductile Iron, Stainless Steel Flanged ball valves



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VALVES AND FITTINGS

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M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

HM Series 3 Piece Threaded High Pressure Fire-Safe Ball Valves

ORDERING CODES

HM-❑-❑-❑-❑

Body Rating	Shell Material	Valve Bore	End Connection	Trim Material	Firesafe	Seat & Seal Material
3 3000 PSI (Class 1500) 6 6000 PSI (Class 2500)	A A105N L LF2 S A182-F316	R Reduced bore F Full bore	T Threaded SW Socketweld	See Note 1	See Note 2	See Note 3

The order code system lets you specify your pressure class, material and reduced or full port.

Note 1: All valves are standard with 316 SS trim and meet NACE MR-01-75-2002 & MR-01-03

Note 2: All valves conform with applicable requirements of the valve fire test per API 607 5th Edition.

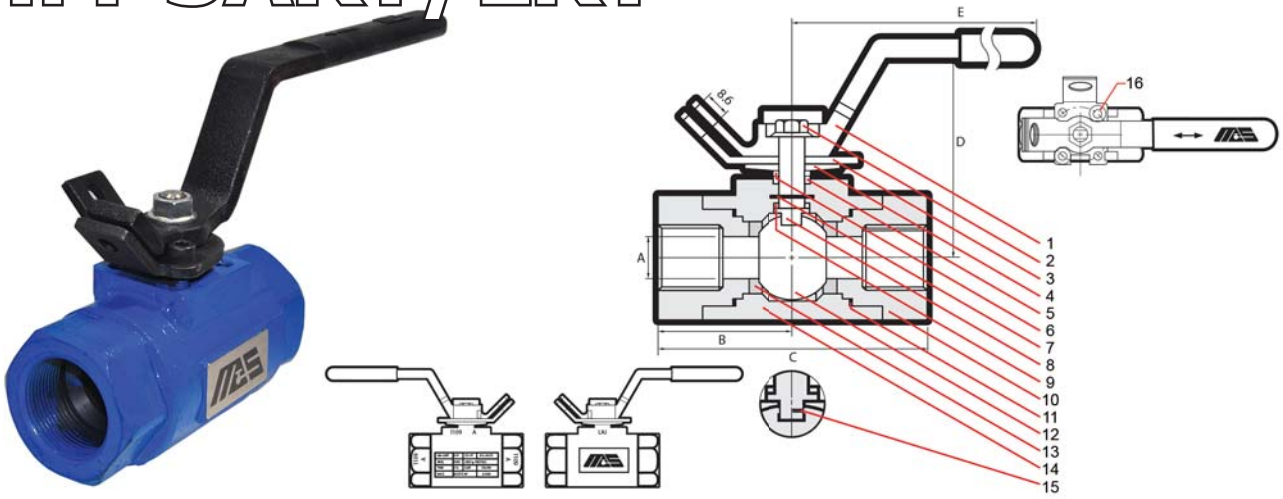
Note 3: Refer to individual drawings for seat / seal and pressure / temperature ratings.

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

HM Series
Forged Steel
3000 PSI Ball Valves

HM-3ART/LRT

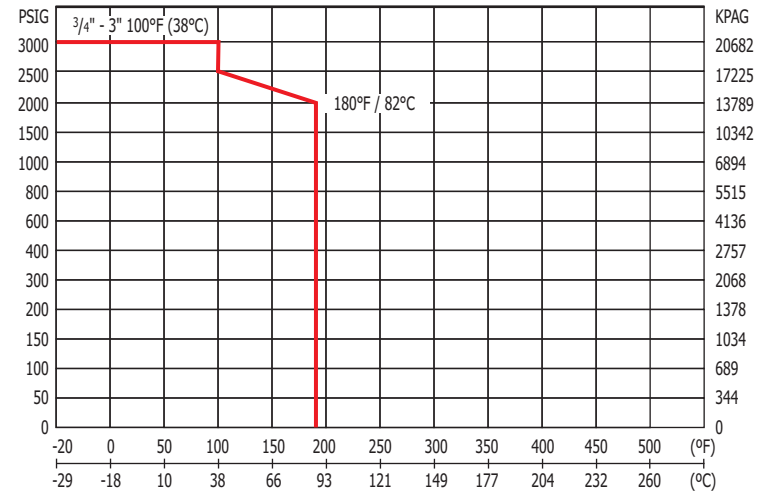
1.2



- **Reduced Port / Floating Ball**
- Three Piece Threaded Body
- LF2 & A105N Forged Steel Construction
- NPT Threads to ANSI B1.20.1
- Blowout Proof Stem
- Anti-Static Design
- Positive Lock-Out Device
- **Fire-Safe Certified to API-607 5th Edition**
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156
- 3000 P.S.I W.O.G. (Class 1500 Limited) 3/4"-3"

NAME / MATERIAL			
NO.	**PART NAME**	**MATERIAL ART**	**MATERIAL LRT**
1	Handle	Ductile Iron	
2	Handle Nut	A36 C.S. Plated	
3	Gland Flange	A36 C.S. Plated	
4	Belleville Washer	S.S. 301	
5	Packing	Graphite	
6	Gland	Stainless Steel A276 Type 304	
7	Stem O-ring	HNBR (1 1/2" - 3")	
8	Stem	Stainless Steel A276 Type 316	
9	Thrust Washer	Delrin	
10	Cap	Forged Steel A105N	A350 GR LF2
11	Body O-ring	HNBR	
12	Ball	Stainless Steel A351 GR. CF8M (316)	
13	Seat	Delrin	
14	Body	Forged Steel A105N	A350 GR LF2
15	Spring and Pin	Stainless Steel A276 Type 304	
16	Cap Screw	A36 C.S. Plated	

PRESSURE TEMPERATURE RATING



For A105N low temp limit is -20°F (-29°C) For LF2 low temp limit is -40°F (-40°C)

DIMENSIONS						
size	**20**	**25**	**32**	**40**	**50**	**80**
mm/in	**3/4**	**1**	**1 1/4**	**1 1/2**	**2**	**3**
A	12.7	22.2	22.2	32.0	38.1	50.0
mm/in	0.50	0.87	0.87	1.26	1.50	1.96
B	55.5	54.0	76.0	79.5	79.5	127.0
mm/in	2.19	2.13	2.99	3.13	3.13	5.00
C	111.0	108.0	152.0	159.0	159.0	254.0
mm/in	4.37	4.25	5.98	6.26	6.26	10.00
D	83.0	112.0	112.0	138.0	143.0	177.0
mm/in	3.27	4.41	4.41	5.43	5.63	6.97
E	122.0	172.0	172.0	279.0	279.0	302.0
mm/in	4.80	6.77	6.77	10.98	10.98	11.89
CV	15	35	35	100	175	480
Weights	1.22	1.72	2.43	3.70	5.89	15.25
lb/kg	2.69	3.79	5.36	8.16	12.99	33.62

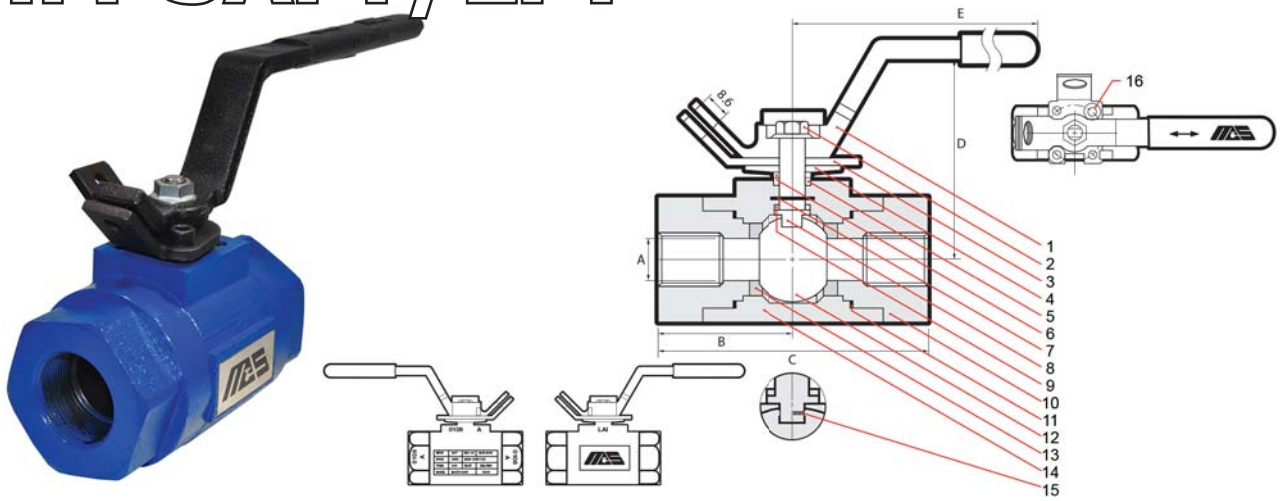
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M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

HM Series
Forged Steel
3000 PSI Ball Valves

HM-3AFT/LFT

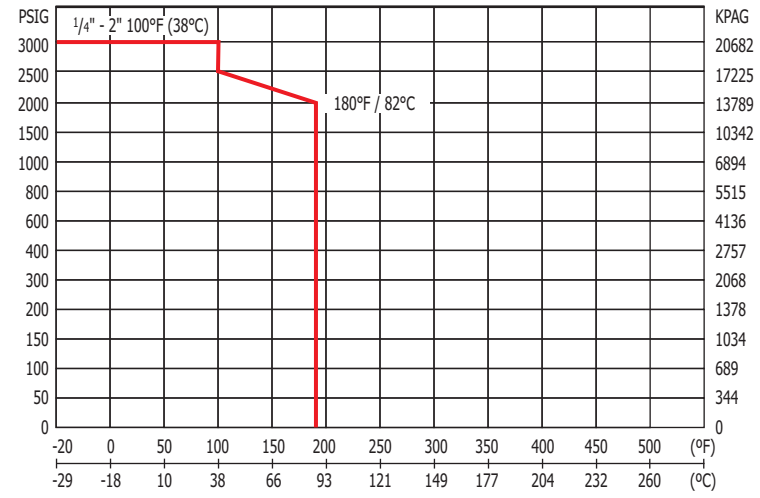
1.3



- **Full Port / Floating Ball**
- Three Piece Threaded Body
- LF2 & A105N Forged Steel Construction
- NPT Threads to ANSI B1.20.1
- Blowout Proof Stem
- Anti-Static Design
- Positive Lock-Out Device
- **Fire-Safe Certified to API-607 5th Edition**
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156
- 3000 P.S.I W.O.G. (Class 1500 Limited) 1/4"-2"

NAME / MATERIAL			
NO.	**PART NAME**	**MATERIAL AFT**	**MATERIAL LFT**
1	Handle	Ductile Iron	
2	Handle Nut	A36 C.S. Plated	
3	Gland Flange	A36 C.S. Plated	
4	Belleville Washer	S.S. 301	
5	Packing	Graphite	
6	Gland	Stainless Steel A276 Type 304	
7	Stem O-ring	HNBR (1 1/2" - 2")	
8	Stem	Stainless Steel A276 Type 316	
9	Thrust Washer	Delrin	
10	Cap	Forged Steel A105N	A350 GR LF2
11	Body O-ring	HNBR	
12	Ball	Stainless Steel A351 GR. CF8M (316)	
13	Seat	Delrin	
14	Body	Forged Steel A105N	A350 GR LF2
15	Spring and Pin	Stainless Steel A276 Type 304	
16	Cap Screw	A36 C.S. Plated	

PRESSURE TEMPERATURE RATING



For A105N low temp limit is -20°F (-29°C) For LF2 low temp limit is -40°F (-40°C)

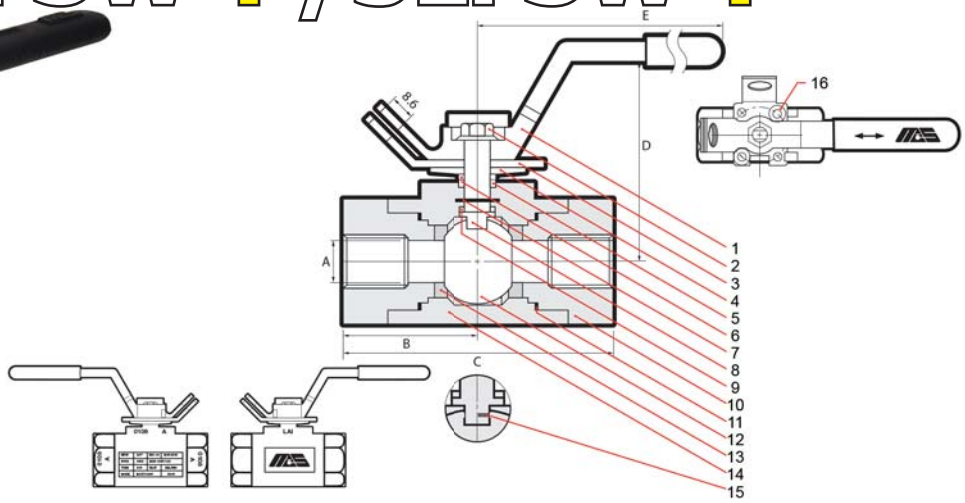
DIMENSIONS							
size	**8**	**15**	**15**	**20**	**25**	**40**	**50**
mm/in	**1/4**	**3/8**	**1/2**	**3/4**	**1**	**1 1/2**	**2**
A	12.7	12.7	12.7	22.2	24.0	38.1	50.0
mm/in	0.50	0.50	0.50	0.87	0.94	1.50	1.96
B	49.0	49.0	49.0	54.0	66.5	79.5	79.5
mm/in	1.93	1.93	1.93	2.13	2.62	3.13	3.13
C	98.0	98.0	98.0	108.0	133.0	159.0	159.0
mm/in	3.86	3.86	3.86	4.25	5.24	6.26	6.26
D	83.0	83.0	83.0	112.0	116.0	143.0	177.0
mm/in	3.27	3.27	3.27	4.41	4.57	5.63	6.97
E	122.0	122.0	122.0	172.0	172.0	279.0	302.0
mm/in	4.80	4.80	4.80	6.77	6.77	10.98	11.89
CV	9	9	15	45	65	250	480
Weights	1.32	1.28	1.20	1.84	2.31	6.15	10.30
kg/lb	2.90	2.82	2.65	4.06	5.09	13.56	22.71

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

HM Series
Forged Steel
3000 PSI Ball Valves

HM-3AFSW-P/3LFSW-P 1.4

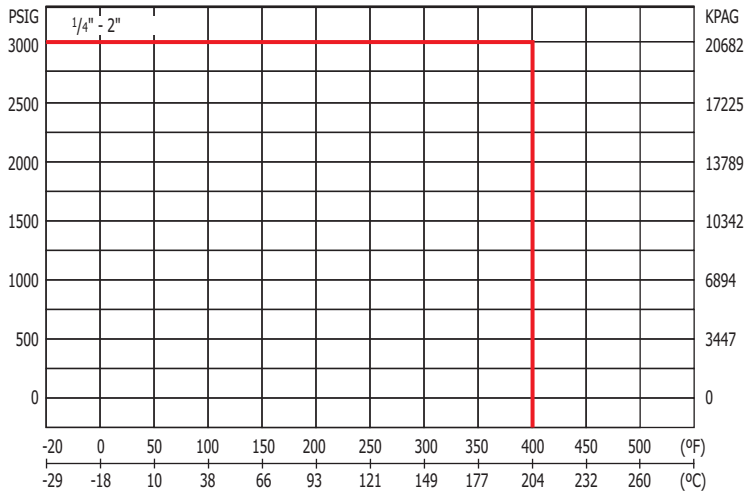




- **Full Port / Floating Ball**
- Forged Steel Construction
- Three Piece Threaded Body
- LF2 & A105N Forged Steel Construction
- Socket Weld Ends to ANSI B16.11
- Blowout Proof Stem
- Anti-Static Design
- Positive Lock-Out Device
- **Fire-Safe Certified to API-607 5th Edition**
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156
- 3000 P.S.I W.O.G. (Class 1500 Limited) 1/4"-2"

NAME / MATERIAL			
NO.	**PART NAME**	**MATERIAL AFSW**	**MATERIAL LFSW**
1	Handle	Ductile Iron	
2	Handle Nut	A36 C.S. Plated	
3	Gland Flange	A36 C.S. Plated	
4	Belleville Washer	S.S. 301	
5	Packing	Graphite	
6	Gland	Stainless Steel A276 Type 304	
7	Stem O-ring	FKM-GLT (1 1/2" - 2")	
8	Stem	Stainless Steel A276 Type 316	
9	Thrust Washer	Peek	
10	Cap	Forged Steel A105N	A350 GR LF2
11	Body O-ring	FKM	
12	Ball	Stainless Steel A351 GR. CF8M (316)	
13	Seat	Peek	
14	Body	Forged Steel A105N	A350 GR LF2
15	Spring and Pin	Stainless Steel A276 Type 304	
16	Cap Screw	A36 C.S. Plated	

PRESSURE TEMPERATURE RATING



For A105N low temp limit is -20°F (-29°C) For LF2 low temp limit is -40°F (-40°C)

DIMENSIONS							
size	**8**	**15**	**15**	**20**	**25**	**40**	**50**
mm/in	**1/4**	**3/8**	**1/2**	**3/4**	**1**	**1 1/2**	**2**
A	12.7	12.7	12.7	22.2	24.0	38.1	50.0
mm/in	0.50	0.50	0.50	0.87	0.94	1.50	1.96
B	49.0	49.0	49.0	54.0	66.5	79.5	79.5
mm/in	1.93	1.93	1.93	2.13	2.62	3.13	3.13
C	98.0	98.0	98.0	108.0	133.0	159.0	159.0
mm/in	3.86	3.86	3.86	4.25	5.24	6.26	6.26
D	83.0	83.0	83.0	112.0	116.0	143.0	177.0
mm/in	3.27	3.27	3.27	4.41	4.57	5.63	6.97
E	122.0	122.0	122.0	172.0	172.0	279.0	302.0
mm/in	4.80	4.80	4.80	6.77	6.77	10.98	11.89
CV	9	9	15	45	65	250	480
Weights	1.32	1.28	1.20	1.84	2.31	6.15	10.30
lb/kg	2.90	2.82	2.65	4.06	5.09	13.56	22.71

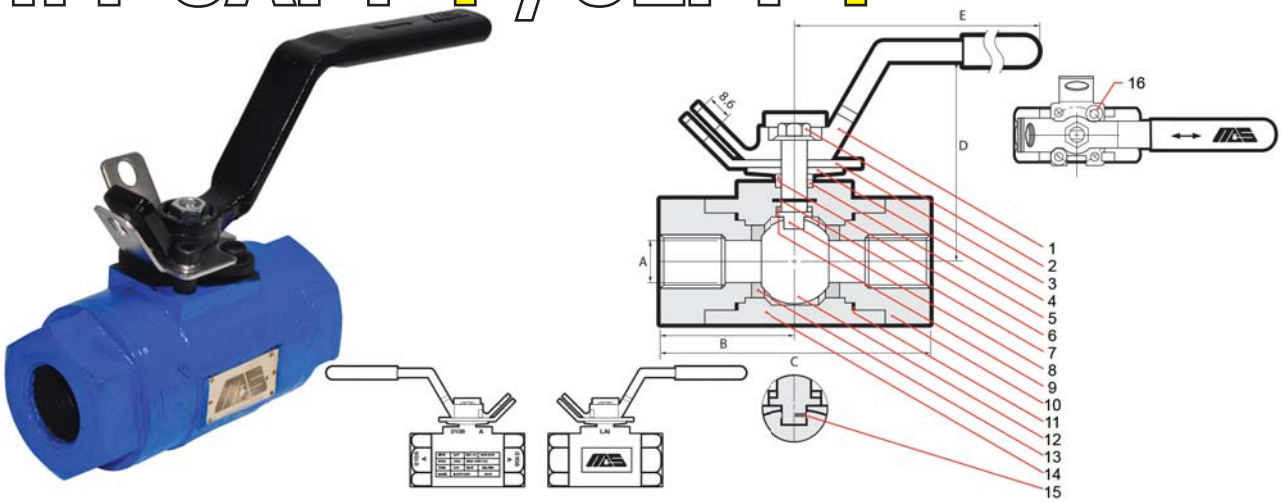
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VALVES AND FITTINGS

HM Series
Forged Steel
6000 PSI Ball Valves

HM-6AFT-P/6LFT-P

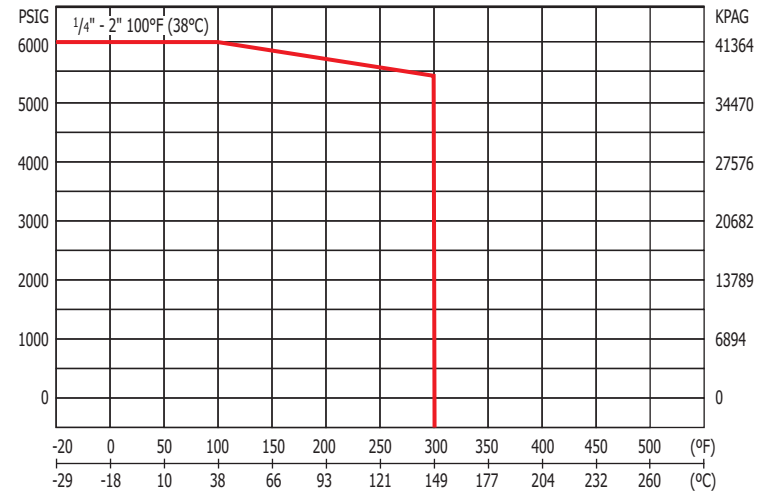
1.5



- **Full Port**
- **Floating Ball**
- Three Piece Threaded Body
- LF2 & A105N Forged Steel Construction
- NPT Threads to ANSI B1.20.1
- Blowout Proof Stem
- Anti-Static Design
- Positive Lock-Out Device
- **Fire-Safe Certified to API-607 5th Edition**
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156
- 6000 P.S.I W.O.G. (Class 2500 Limited) 1/4"-2"

NAME / MATERIAL			
NO.	**PART NAME**	**MATERIAL AFT**	**MATERIAL LFT**
1	Handle	Ductile Iron	
2	Handle Nut	A36 C.S. Plated	
3	Gland Flange	A36 C.S. Plated	
4	Belleville Washer	S.S. 301	
5	Packing	Graphite	
6	Gland	Stainless Steel A276 Type 304	
7	Stem O-ring	HNBR (1 1/2" - 2")	
8	Stem	Stainless Steel A276 Type 316	
9	Thrust Washer	Peek	
10	Cap	Forged Steel A105N	A350 GR LF2
11	Body O-ring	HNBR	
12	Ball	Stainless Steel A351 GR. CF8M (316)	
13	Seat	Peek	
14	Body	Forged Steel A105N	A350 GR LF2
15	Spring and Pin	Stainless Steel A276 Type 304	
16	Cap Screw	A36 C.S. Plated	

PRESSURE TEMPERATURE RATING



For A105N low temp limit is -20°F (-29°C) For LF2 low temp limit is -40°F (-40°C)

DIMENSIONS							
size	**8**	**15**	**15**	**20**	**25**	**40**	**50**
mm/in	**1/4**	**3/8**	**1/2**	**3/4**	**1**	**1 1/2**	**2**
A	12.7	12.7	12.7	22.2	24.0	38.1	50.0
mm/in	0.50	0.50	0.50	0.87	0.94	1.50	1.96
B	49.0	49.0	55.5	54.0	66.5	79.5	79.5
mm/in	1.93	1.93	2.19	2.13	2.62	3.13	3.13
C	98.0	98.0	111.0	108.0	133.0	159.0	159.0
mm/in	3.86	3.86	4.37	4.25	5.24	6.26	6.26
D	83.0	83.0	83.0	112.0	116.0	143.0	177.0
mm/in	3.27	3.27	3.27	4.41	4.57	5.63	6.97
E	122.0	122.0	122.0	172.0	172.0	279.0	302.0
mm/in	4.80	4.80	4.80	6.77	6.77	10.98	11.89
CV	9	9	15	45	65	250	480
Weights	1.42	1.39	1.36	1.94	3.00	8.86	11.22
lb/kg	3.12	3.06	3.00	4.28	6.61	19.53	24.74

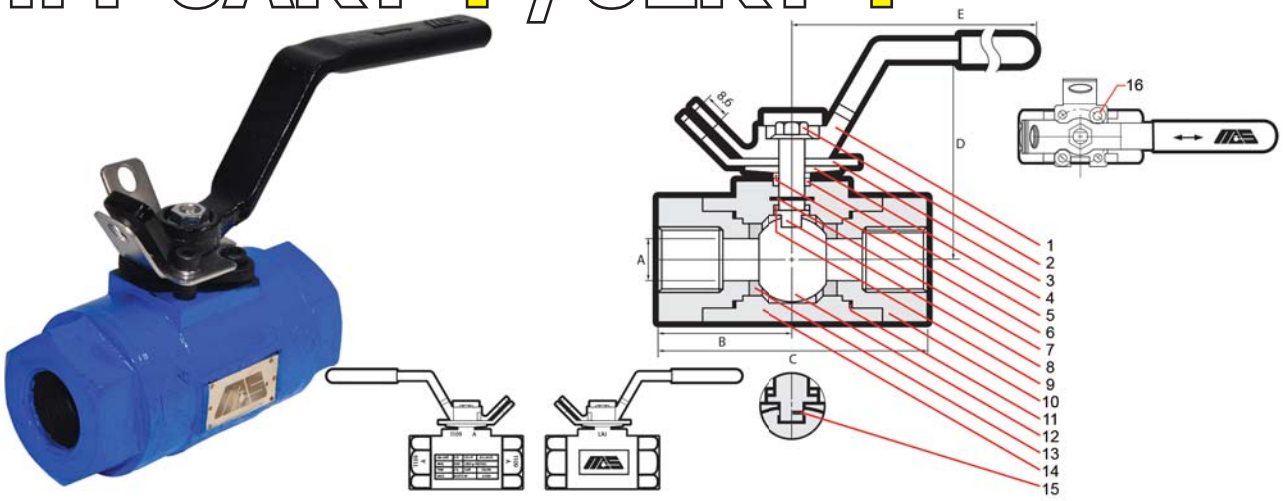
Technical data, dimensions, materials & specifications are subject to change without notice. MAS CA JUNE 18 2018

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

HM Series
Forged Steel
6000 PSI Ball Valves

HM-6ART-P/6LRT-P

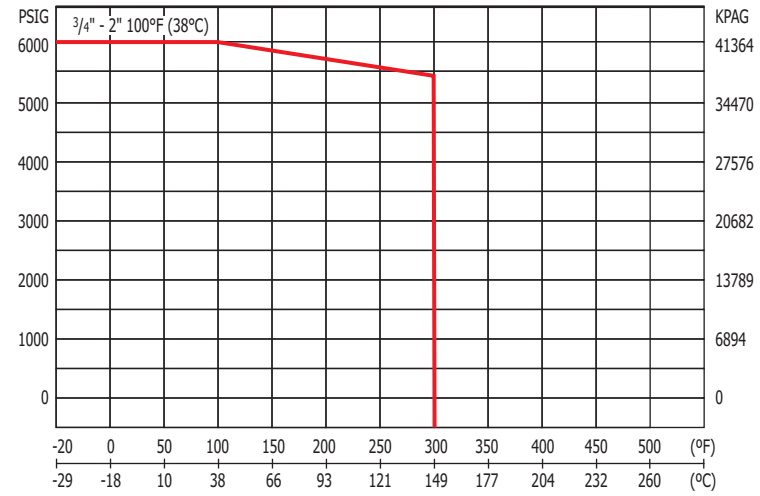
1.6



- **Reduced Port**
- **Floating Ball**
- Three Piece Threaded Body
- LF2 & A105N Forged Steel Construction
- NPT Threads to ANSI B1.20.1
- Blowout Proof Stem
- Anti-Static Design
- Positive Lock-Out Device
- **Fire-Safe Certified to API-607 5th Edition**
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156
- 6000 P.S.I W.O.G. (Class 2500 Limited) 3/4"-2"

NAME / MATERIAL			
NO.	**PART NAME**	**MATERIAL ART**	**MATERIAL LRT**
1	Handle	Ductile Iron	
2	Handle Nut	A36 C.S. Plated	
3	Gland Flange	A36 C.S. Plated	
4	Belleville Washer	S.S. 301	
5	Packing	Graphite	
6	Gland	Stainless Steel A276 Type 304	
7	Stem O-ring	HNBR (1 1/2" - 2")	
8	Stem	Stainless Steel A276 Type 316	
9	Thrust Washer	Peek	
10	Cap	Forged Steel A105N	A350 GR LF2
11	Body O-ring	HNBR	
12	Ball	Stainless Steel A351 GR. CF8M (316)	
13	Seat	Peek	
14	Body	Forged Steel A105N	A350 GR LF2
15	Spring and Pin	Stainless Steel A276 Type 304	
16	Cap Screw	A36 C.S. Plated	

PRESSURE TEMPERATURE RATING



For A105N low temp limit is -20°F (-29°C) For LF2 low temp limit is -40°F (-40°C)

DIMENSIONS					
size	**20**	**25**	**32**	**40**	**50**
mm/in	**3/4**	**1**	**1 1/4**	**1 1/2**	**2**
A	12.7	22.2	22.2	32.0	38.1
mm/in	0.50	0.87	0.87	1.26	1.50
B	55.0	66.5	76.0	79.5	92.0
mm/in	2.19	2.62	2.99	3.13	3.62
C	111.0	133.0	152.0	159.0	184.0
mm/in	4.37	5.24	5.98	6.26	7.24
D	83.0	112.0	112.0	138.0	143.0
mm/in	3.27	4.41	4.41	5.43	5.63
E	122.0	172.0	172.0	279.0	279.0
mm/in	4.80	6.77	6.77	10.98	10.98
CV	15	35	35	100	175
Weights	1.19	2.62		6.20	10.20
kg/lb	2.62	5.78		13.67	22.49

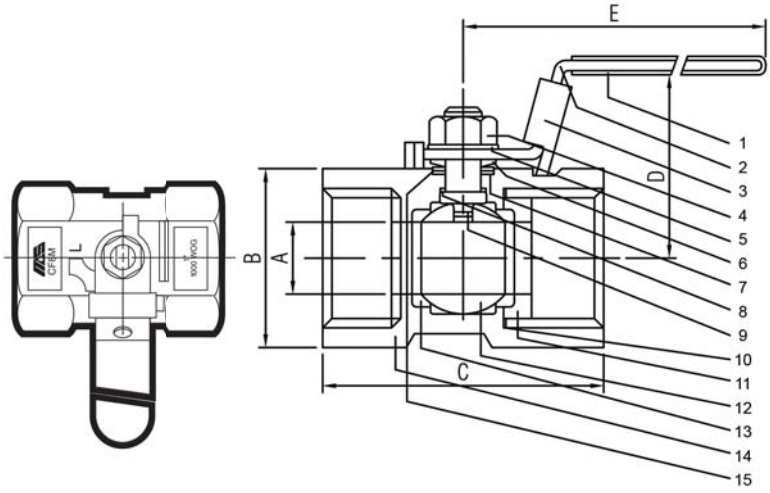
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

G Series
Investment Cast
Stainless Steel Ball Valves

G1

2.1

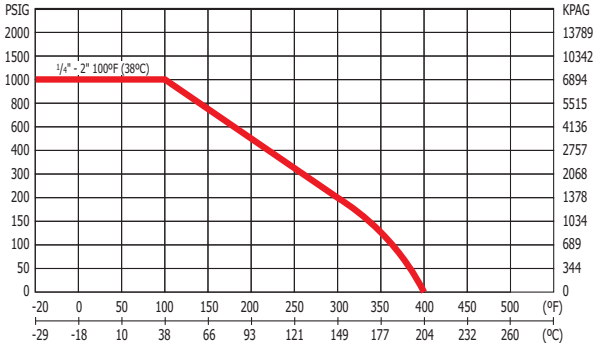




- Reduced port
- NPT ends to ANSI B1.20.1
- One piece body
- Blowout-proof stem
- Locking lever handle (Ring lock with 1/4" to 3/8", Latch lock with 1/2" to 2")
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156
- 1000 PSI, WOG 1/4" to 2"
- Available with Oval handle

NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle Grip	Vinyl
2	Handle	A276 Type 304
3	Locking Device	A276 Type 304
4	Handle Nut	A276 Type 304
5	Stem Washer	A276 Type 304
6	Belleville Washer	S.S. 301
7	Packing	PTFE
8	Thrust Washer	R-PTFE 15% GLASS-FILLED
9	Stem	A276 TYPE 316
10	Gasket	PTFE
11	Seat Retainer	A351 GRADE CF8M
12	Ball	A351 GRADE CF8M
13	Seat	R-PTFE 15% GLASS-FILLED
14	Body	A351 GRADE CF8M
15	Spring Washer	A276 Type 304

PRESSURE TEMPERATURE RATING



DIMENSIONS								
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	**CV**	WEIGHT KGS/LBS
8	**1/4"**	4.60	17.0	40.5	34.0	77.0	1.5	0.072
		0.181	0.669	1.594	1.336	3.031		0.158
10	**3/8"**	6.80	21.5	48.0	35.5	85.0	3.5	0.112
		0.268	0.846	1.890	1.398	3.346		0.246
15	**1/2"**	9.20	26.0	57.0	43.0	98.0	5.7	0.208
		0.362	1.024	2.244	1.693	3.858		0.458
20	**3/4"**	12.5	32.0	59.0	48.5	98.0	10	0.271
		0.492	1.260	2.323	1.99	3.858		0.596
25	**1"**	16.0	38.0	70.54	60.0	107.0	16	0.428
		0.630	1.496	2.777	2.362	4.212		0.942
32	**1 1/4"**	20.0	49.0	77.5	61.5	107.0	25	0.705
		0.787	1.929	3.051	2.421	4.212		1.551
40	**1 1/2"**	24.5	52.5	82.5	70.5	135.0	40	0.826
		0.965	2.067	3.248	2.776	5.315		1.817
50	**2"**	32.0	66.0	99.3	83.0	143.0	62	1.380
		1.260	2.598	3.909	3.268	5.630		3.036

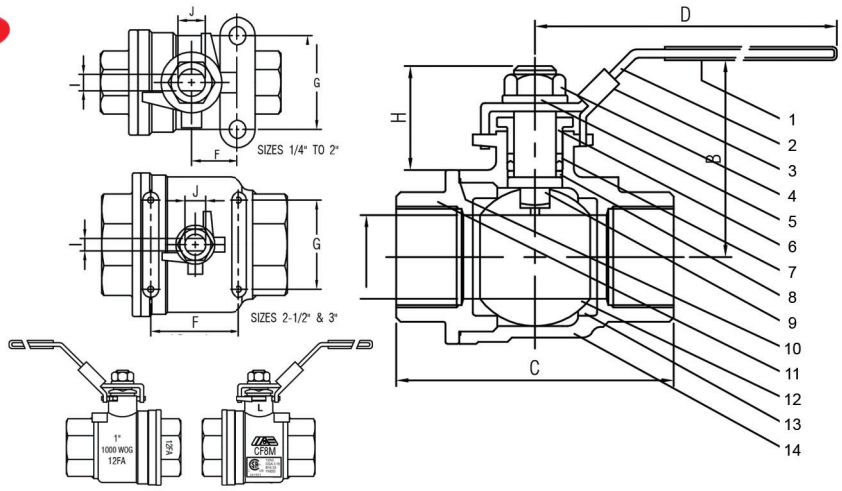
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

G Series
Investment Cast Stainless Steel 1000 WOG Ball Valves

G2-E

2.2



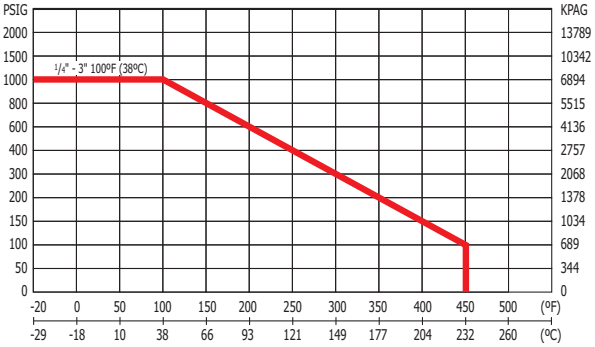


- Full port
- NPT ends to ANSI B1.20.1
- Two piece body
- Blowout-proof stem
- Adjustable packing nut
- Locking lever handle
- Floating ball
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156
- 1000 PSI, WOG 1/4" to 3"
- P-T 100 PSI @ 450°F

NATURAL AND PROPANE GAS SERVICE:
CSA 3.16 125 PSI TO -40°C (1/4" -2")
-30°C (2-1/2" & 3")
ASME B16.33 175 PSI (1/2" - 2")
ASME B16.38 125 PSI (2-1/2" - 3")

NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle Grip	Vinyl
2	Handle	A276 TYPE 304
3	Locking Device	A276 TYPE 304
4	Handle Nut	A276 TYPE 304
5	Stem Washer	A276 TYPE 304
6	Gland Nut	A276 TYPE 304
7	Packing	R-PTFE 15% GLASS-FILLED
8	Thrust Washer	R-PTFE 15% GLASS-FILLED
9	Stem	A276 TYPE 316
10	Gasket	R-PTFE 15% GLASS-FILLED
11	Cap	A351 GRADE CF8M
12	Ball	A351 GRADE CF8M
13	Seat	R-PTFE 15% GLASS-FILLED
14	Body	A351 GRADE CF8M

PRESSURE TEMPERATURE RATING



DIMENSIONS												
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	**CV**	WEIGHT KGS/ LBS
8	**1/4"**	9.6	50.1	49.8	96.0	12.7	25.4	21.8	5.50	8.0	7	0.184
		0.378	1.972	1.961	3.780	0.500	1.000	0.858	0.217	0.315		0.406
10	**3/8"**	9.6	50.1	49.8	96.0	12.7	25.4	21.8	5.50	8.0	7	0.186
		0.378	1.972	1.961	3.780	0.500	1.000	0.858	0.217	0.315		0.410
15	**1/2"**	12.5	50.1	55.0	96.0	12.7	25.4	21.35	5.50	8.0	15	0.219
		0.492	1.972	2.165	3.780	0.500	1.000	0.841	0.217	0.315		0.483
20	**3/4"**	20.0	64.8	66.0	119.5	14.85	29.7	26.0	6.0	8.1	45	0.389
		0.787	2.264	2.598	4.705	0.585	1.169	1.024	0.236	0.319		0.858
25	**1"**	24.7	61.0	77.2	119.5	14.85	29.7	26.0	6.0	8.1	65	0.563
		0.972	2.402	3.039	4.705	0.585	1.169	1.024	0.236	0.319		1.241
32	**1 1/4"**	32.0	71.0	90.0	138.2	17.68	35.40	31.0	8.1	10.2	125	1.274
		1.260	2.795	3.543	5.441	0.696	1.394	1.220	0.319	0.402		2.809
40	**1 1/2"**	38.1	76.0	101	138.2	17.68	35.35	31.0	8.1	10.2	175	1.435
		1.500	2.992	3.976	5.441	0.696	1.392	1.220	0.319	0.402		3.164
50	**2"**	50.0	91.5	117	159.2	23.62	49.5	39.0	10.0	14.0	380	2.489
		1.968	3.602	4.606	6.268	0.930	1.949	1.535	0.394	0.551		5.487
65	**2 1/2"**	63.5	118.7	147	244.0	72.1	72.1	42.9	12.05	19.2	500	4.784
		2.500	4.673	5.797	9.606	2.839	2.839	1.689	0.474	0.756		10.547
80	**3"**	76.0	128.7	168	244.0	72.1	72.1	43.9	12.05	19.2	900	7.133
		2.992	5.067	6.614	9.606	2.839	2.839	1.728	0.474	0.756		15.726

Technical data, dimensions, materials & specifications are subject to change without notice. MAS CA 01-10-2018

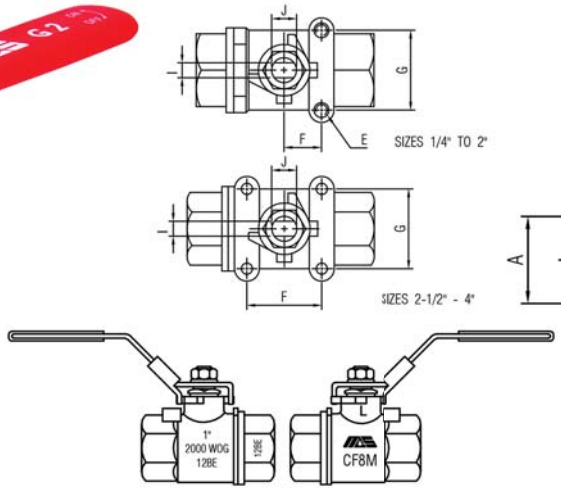
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

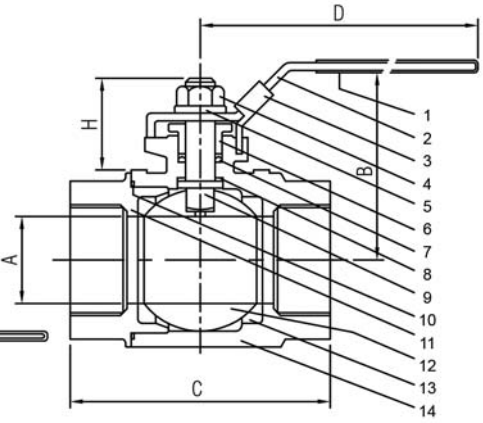
G Series
Investment Cast Stainless Steel 2000 WOG Ball Valves

G2

2.3





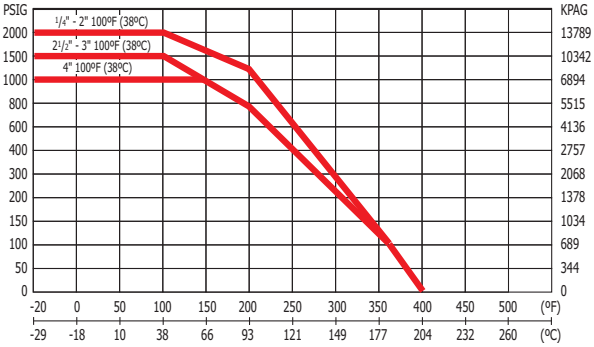


- Full port
- NPT threads to ANSI B1.20.1
- Two piece body
- Blowout proof stem
- Adjustable packing nut
- Locking lever handle
- Actuator mounting pad
- Floating ball
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156
- 2000 PSI, WOG 1/4" to 2"
- 1500 PSI, WOG 2-1/2" to 3"
- 1000 PSI, WOG 4"

- **Available with Oval handle for size range: 1/4"-2"**
- **1/4" and 3/8" have non-tapped reserve holes cast in**
- **1/2" to 2" mounting pads are tapped, 2 1/2" and 3"**

NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle Grip	Vinyl
2	Handle	A276 TYPE 304
3	Locking Device	A276 TYPE 304
4	Handle Nut	A276 TYPE 304
5	Stem Washer	A276 TYPE 304
6	Gland Nut	A276 TYPE 304
7	Packing	PTFE
8	Thrust Washer	R-PTFE 15% GLASS-FILLED
9	Stem	A276 TYPE 316
10	Gasket	PTFE
11	Cap	A351 GRADE CF8M
12	Ball	A351 GRADE CF8M
13	Seat	R-PTFE 15% GLASS-FILLED
14	Body	A351 GRADE CF8M

PRESSURE TEMPERATURE RATING



NOTE 1 Untapped
NOTE 2 Dimpled at drilling locations

DIMENSIONS														
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	**E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	**CV**	WEIGHT KGS/ LBS
8	**1/4"**	9.6	50.28	55.80	96	NOTE (1)	12.7	25.4	20.78	5.52	8.00	7	0.230
		0.378	1.980	2.197	3.780		0.5	1.00	0.818	0.217	0.315		0.506
10	**3/8"**	9.6	50.28	55.80	96	NOTE (1)	12.7	25.4	20.78	5.52	8.00	7	0.225
		0.378	1.980	2.197	3.780		0.5	1.00	0.818	0.217	0.315		0.495
15	**1/2"**	12.5	52.6	60.5	96	M5	12.7	25.4	23.1	5.55	8.00	15	0.280
		0.492	2.071	2.382	3.780		0.5	1.00	0.909	0.219	0.315		0.616
20	**3/4"**	20	59.25	72.5	119	M6	15.80	29.40	28.75	6.50	10	45	0.520
		0.787	2.333	2.854	4.685		0.622	1.157	1.132	0.256	0.394		1.144
25	**1"**	24.7	62.35	85.5	119	M6	15.80	29.40	27.85	6.50	10	65	0.765
		0.972	2.455	3.366	4.685		0.622	1.157	1.096	0.256	0.394		1.683
32	**1 1/4"**	32	79.90	93	149	M8	17.68	35.35	36.20	8.07	12.00	125	1.292
		1.260	3.146	3.661	5.866		0.696	1.392	1.425	0.317	0.480		2.842
40	**1 1/2"**	38.1	84.8	110.5	149	M8	25	49.50	37.30	8.07	12.00	175	1.864
		1.5	3.339	4.350	5.866		0.984	1.949	1.469	0.317	0.480		4.101
50	**2"**	50	94.6	128	174	M8	23.6	50	36.1	10.00	14.00	380	3.170
		1.969	3.724	5.039	6.850		0.929	1.969	1.421	0.394	0.551		6.974
65	**2 1/2"**	63.50	122.05	153.8	244	NOTE (2)	72.10	72.10	45.35	12.00	16.00	500	5.796
		2.500	4.805	6.055	9.606		2.839	2.839	1.785	0.472	0.630		12.751
80	**3"**	76	131.55	175.5	244	NOTE (2)	70.00	73.00	44.85	12.00	16.00	900	8.285
		2.992	5.179	6.909	9.606		2.756	2.874	1.766	0.472	0.630		18.227
100	**4"**	100	178.6	233	321	NOTE (2)	102	102	64.5	18	23	1250	20.5
		3.937	7.031	9.173	12.637		4.015	4.015	2.539	0.708	0.905		45.194

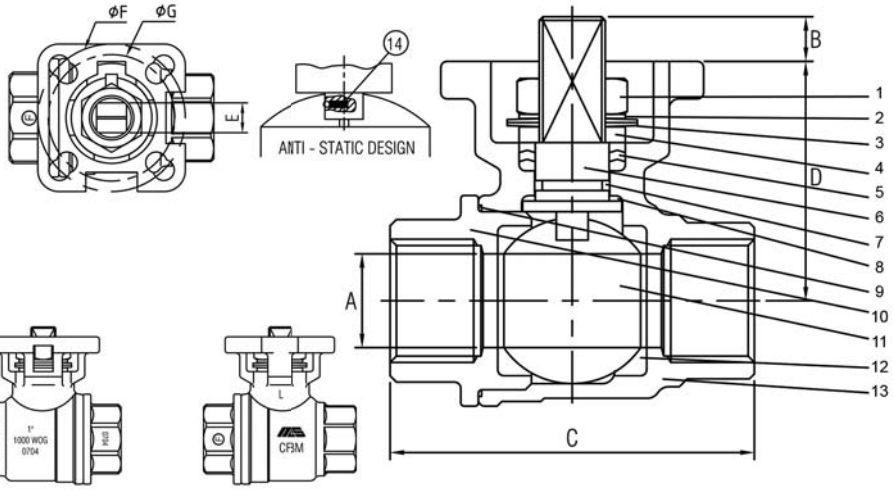
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

G Series Investment Cast Stainless Steel Direct Mount Ball Valves

G2-ED

2.4

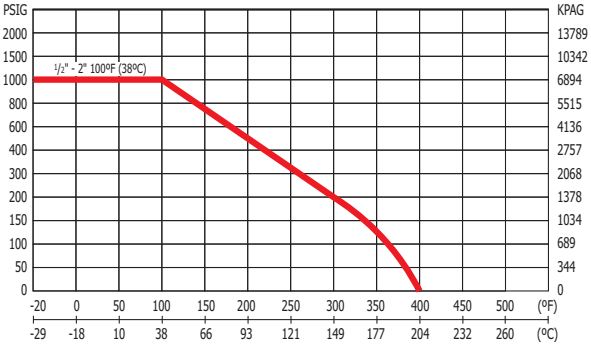




- Full port
- NPT threads to ANSI B1.20.1
- Two piece body
- Blowout-proof stem
- ISO 5211 Direct Mounting Pad
- Adjustable Live-loaded Packing
- Anti-static Device
- Floating Ball
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156
- 1000 PSI, WOG 1/2" to 2"
- **Compatible with Max-Air / MAS Actuators**

NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle Nut	A276 TYPE 304
2	Lock Washer	A276 TYPE 304
3	Belleville Washer	A276 TYPE 304
4	Gland Nut	A276 TYPE 304
5	Packing	PTFE
6	Stem	A276 TYPE 316
7	Packing	VITON-ORINGS
8	Thrust Washer	RPTFE (MG1241)
9	Gasket	PTFE
10	Cap	A351 GRADE CF8M
11	Ball	A351 GRADE CF8M
12	Seat	R-PTFE 15% GLASS-FILLED
13	Body	A351 GRADE CF8M
14	Spring & pin	A276 TYPE 304

PRESSURE TEMPERATURE RATING



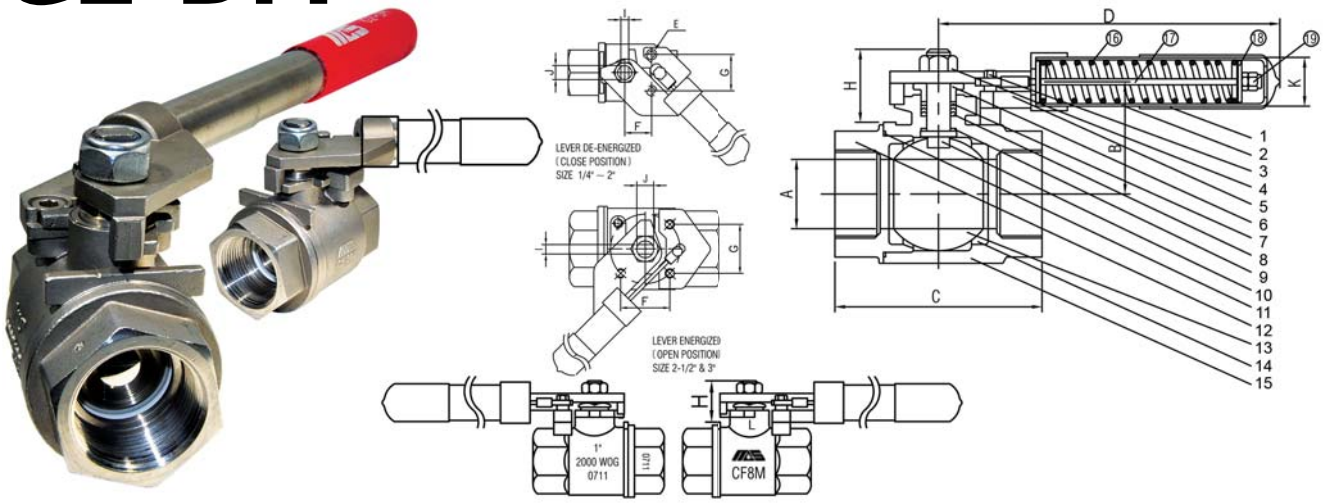
DIMENSIONS										
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	mm/in **F**	mm/in **G**	**ISO 5211**	WEIGHT KGS/ LBS
15	**1/2"**	15.0	10.0	58.20	36.3	9.0	42.0	36.0	F03 / F04	0.208
		0.590	0.394	2.291	1.429	0.354	1.653	1.417		0.458
20	**3/4"**	20.0	10.0	66.00	39.5	9.0	42.0	36.0	F03 / F04	0.398
		0.787	0.394	2.598	1.555	0.354	1.653	1.417		0.876
25	**1"**	24.0	11.0	77.70	50.5	11.0	50.0	42.0	F04 / F05	0.703
		0.945	0.433	3.059	1.988	0.433	1.968	1.653		1.547
32	**1 1/4"**	31.8	11.0	90.40	56.0	11.0	50.0	42.0	F04 / F05	1.040
		1.252	0.433	3.559	2.205	0.433	1.968	1.653		2.288
40	**1 1/2"**	38.1	17.0	102.4	70.6	14.0	70.0	50.0	F05 / F07	1.690
		1.500	0.669	4.031	2.779	0.551	2.756	1.968		3.718
50	**2"**	50.0	17.0	119.0	79.0	14.0	70.0	50.0	F05 / F07	2.700
		1.968	0.669	4.685	3.110	0.551	2.756	1.968		5.940

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

G Series Investment Cast Stainless Steel, Deadman Spring Handle Ball Valves

G2-DM

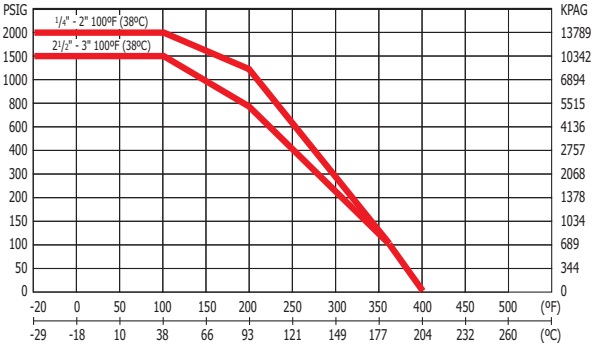
2.5



- Two piece body
- Full port
- NPT threads to ANSI B1.20.1
- Blowout-proof stem
- Adjustable packing nut
- Deadman handle
- Actuator mounting pad
- Floating ball
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156
- 2000 P.S.I. W.O.G. 1/4" to 2"
- 1500 P.S.I. W.O.G. 2-1/2" & 3"

NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle Grip	Vinyl
2	Handle Housing	A269 GR. TP304
3	Anchor Screw	A276 TYPE 304
4	Handle Nut	C.S.Plated
5	Anchor	A351 GRADE CF8M
6	Gland Nut	A276 TYPE 304
7	Packing Washer	PEEK
8	Packing	RPTFE 50% S/S FILLED
9	Thrust Washer	PEEK
10	Stem	A276 TYPE 316
11	Gasket	PTFE
12	Cap	A351 GRADE CF8M
13	Ball	A351 GRADE CF8M
14	Seat	R-PTFE 15% GLASS-FILLED
15	Body	A351 GRADE CF8M
16	Spring	A29 GRADE 9260
17	Rod	A276 TYPE 304
18	Washer	A276 TYPE 304
19	Nuts	A194 GRADE 8

PRESSURE TEMPERATURE RATING



DIMENSIONS															
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	**E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	mm/in **K**	**CV**	WEIGHT KGS/LBS
8	**1/4"**	9.6	26.5	55.4	180.5	M6	12.73	25.4	25.5	5.50	7.70	22.0	7	0.605
		0.374	1.043	2.181	7.106		0.501	1.000	1.004	0.217	0.303	0.866		1.334
10	**3/8"**	9.6	26.5	55.4	180.5	M6	12.73	25.4	25.5	5.50	7.70	22.0	7	0.595
		0.374	1.043	2.181	7.106		0.501	1.000	1.004	0.217	0.303	0.866		1.312
15	**1/2"**	12.7	29.0	62.0	180.5	M6	12.73	25.4	25.5	5.50	7.70	22.0	15	0.658
		0.500	1.142	2.441	7.106		0.501	1.000	1.004	0.217	0.303	0.866		1.451
20	**3/4"**	20	36.2	73.1	232.5	M6	15.8	29.40	32.5	6.50	9.30	22.0	45	0.872
		0.787	1.425	2.878	9.154		0.622	1.157	1.280	0.256	0.367	0.866		1.922
25	**1"**	25	39.3	86.0	232.5	M6	15.8	29.40	31.0	6.50	9.30	22.0	65	1.112
		0.984	1.547	3.386	9.154		0.622	1.157	1.220	0.256	0.367	0.866		2.451
32	**1 1/4"**	32	51.3	94.0	287	M8	23.6	35.00	41.6	8.00	12.50	22.0	125	1.556
		1.260	2.021	3.700	11.299		0.929	1.378	1.638	0.315	0.492	0.866		3.430
40	**1 1/2"**	38	57.2	116.0	290	M8	23.6	49.20	41.0	8.00	12.50	22.0	175	2.655
		1.496	2.253	4.567	11.417		0.929	1.937	1.614	0.315	0.492	0.866		5.853
50	**2"**	50.8	67.6	134.0	313	M8	23.6	49.2	46.0	10.00	15.60	32.0	380	3.746
		2.000	2.662	5.276	12.323		0.929	1.937	1.811	0.394	0.614	1.260		8.258
65	**2 1/2"**	65	82.7	164.0	313	M8	70.0	73.0	48.0	12.00	18.80	32.0	500	6.552
		2.559	3.255	6.457	12.323		2.756	2.874	1.890	0.472	0.740	1.260		14.444
80	**3"**	78	92.7	180.0	313	M8	70.0	73.0	48.0	12.00	18.80	32.0	900	9.672
		3.071	3.649	7.086	12.323		2.756	2.874	1.890	0.472	0.740	1.260		21.323

Technical data, dimensions, materials & specifications are subject to change without notice. MAS CA JUNE 18 2018

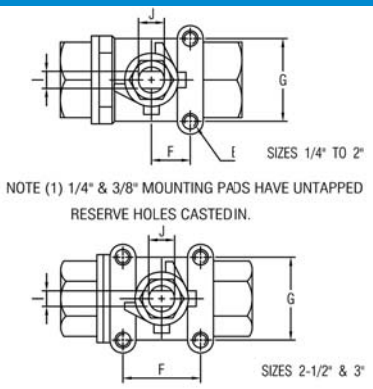
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

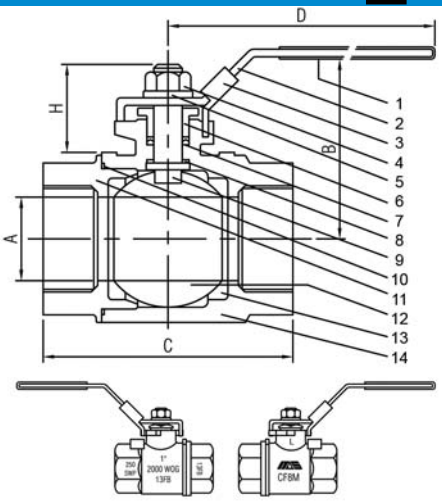
G Series Investment Cast, 250 Steam Rated Stainless Steel Ball Valves

G2-250

2.6





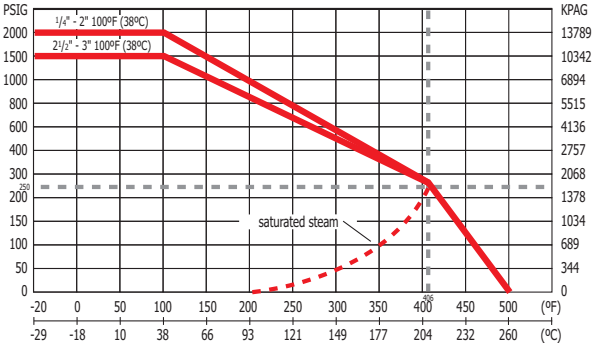


- Two piece body
- Full port
- NPT ends to ANSI B1.20.1
- **250 PSIG saturated steam trim**
- Blowout proof stem
- Adjustable packing nut
- Locking lever handle
- Actuator mounting pad
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156
- 2000 PSI, WOG 1/4" to 2"
- 1500 PSI, WOG 2-1/2" to 3"

• Available with oval handle for sizes 1/4" - 2"
• 1/4" and 3/8" have reserve holes cast in, 1/2" to 2" mounting pads are tapped, 2-1/2" and 3" are dimpled.

NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle Grip	Vinyl
2	Handle	A276 TYPE 304
3	Locking Device	A276 TYPE 304
4	Handle Nut	A276 TYPE 304
5	Stem Washer	A276 TYPE 304
6	Gland Nut	A276 TYPE 304
7	Packing	R-PTFE(TFM-4215)
8	Thrust Washer	R-PTFE(TFM-4215)
9	Stem	A276 TYPE 316
10	Gasket	R-PTFE(TFM-4215)
11	Cap	A351 GRADE CF8M
12	Ball	A351 GRADE CF8M
13	Seat	R- PTFE(TFM-4215)
14	Body	A351 GRADE CF8M

PRESSURE TEMPERATURE RATING



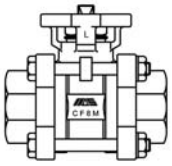
DIMENSIONS														
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	**E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	**CV**	WEIGHT KGS/ LBS
8	**1/4"**	9.6	50.28	55.80	96	NOTE (1)	12.7	25.4	20.78	5.52	8.00	7	0.230
		0.378	1.980	2.197	3.780		0.5	1.00	0.818	0.217	0.315		0.506
10	**3/8"**	9.6	50.28	55.80	96	NOTE (1)	12.7	25.4	20.78	5.52	8.00	7	0.225
		0.378	1.980	2.197	3.780		0.5	1.00	0.818	0.217	0.315		0.495
15	**1/2"**	12.5	52.6	60.5	96	M5	12.7	25.4	23.1	5.55	8.00	15	0.280
		0.492	2.071	2.382	3.780		0.5	1.00	0.909	0.219	0.315		0.616
20	**3/4"**	20	59.25	72.5	119	M6	15.80	29.40	28.75	6.50	10	45	0.520
		0.787	2.333	2.854	4.685		0.622	1.157	1.132	0.256	0.394		1.144
25	**1"**	24.7	62.35	85.5	119	M6	15.80	29.40	27.85	6.50	10	65	0.765
		0.972	2.455	3.366	4.685		0.622	1.157	1.096	0.256	0.394		1.683
32	**1 1/4"**	32	79.90	93	149	M8	17.68	35.35	36.20	8.07	12.00	125	1.292
		1.260	3.146	3.661	5.866		0.696	1.392	1.425	0.317	0.480		2.842
40	**1 1/2"**	38.1	84.8	110.5	149	M8	25	49.50	37.30	8.07	12.00	175	1.864
		1.5	3.339	4.350	5.866		0.984	1.949	1.469	0.317	0.480		4.101
50	**2"**	50	94.6	128	174	M8	23.6	50	36.1	10.00	14.00	380	3.170
		1.969	3.724	5.039	6.850		0.929	1.969	1.421	0.394	0.551		6.974
65	**2 1/2"**	63.50	122.05	153.8	244	NOTE (2)	72.10	72.10	45.35	12.00	16.00	500	5.796
		2.500	4.805	6.055	9.606		2.839	2.839	1.758	0.472	0.630		12.751
80	**3"**	76	131.5	175.5	244	NOTE (2)	70.00	73.00	44.85	12.00	16.00	900	8.285
		2.992	5.179	6.909	9.606		2.756	2.874	1.766	0.472	0.630		18.227

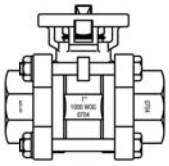
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

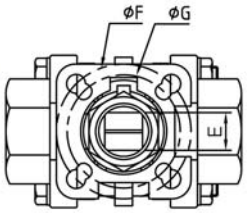
G Series Investment Cast Stainless Steel Direct Mount Ball Valves

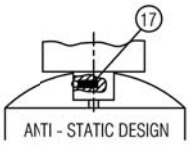
G3-ED

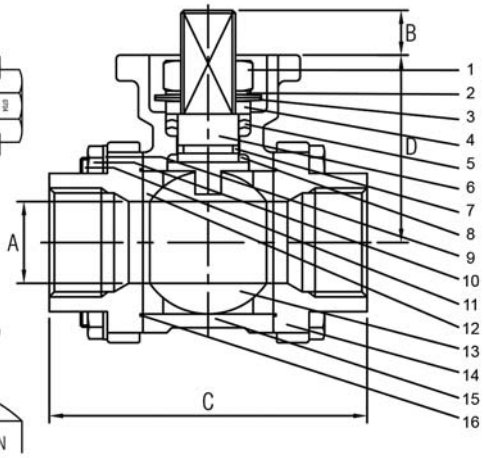








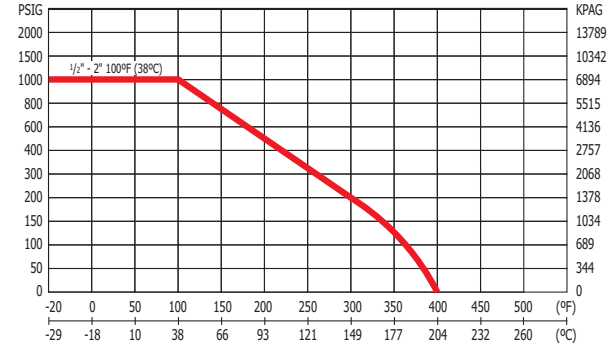




- Full port
- NPT Threads to ANSI B1.20.1
- Three piece body
- Blowout-proof stem
- Adjustable live-loaded packing
- Anti-static device
- Floating Ball
- ISO 5211 direct mounting pad
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156
- 1000 PSI, WOG 1/2" to 2"
- Compatible with Max-Air/MAS Actuators

NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle Nut	A276 TYPE 304
2	Lock Washer	A276 TYPE 304
3	Belleville Washer	A276 TYPE 304
4	Gland Nut	A276 TYPE 304
5	Packing	PTFE
6	Stem	A276 TYPE 316
7	Packing	VITON-ORINGS
8	Thrust Washer	RPTFE (MG1241)
9	Bolt Washer	A276 TYPE 304
10	Hex Nut	A194 GRADE 8
11	Bolt	A193 GRADE B8
12	Seat	R-PTFE 15% GLASS-FILLED
13	Ball	A351 GRADE CF8M
14	Cap	A351 GRADE CF8M
15	Body	A351 GRADE CF8M
16	Gasket	PTFE
17	Spring & pin	A276 TYPE 304

PRESSURE TEMPERATURE RATING



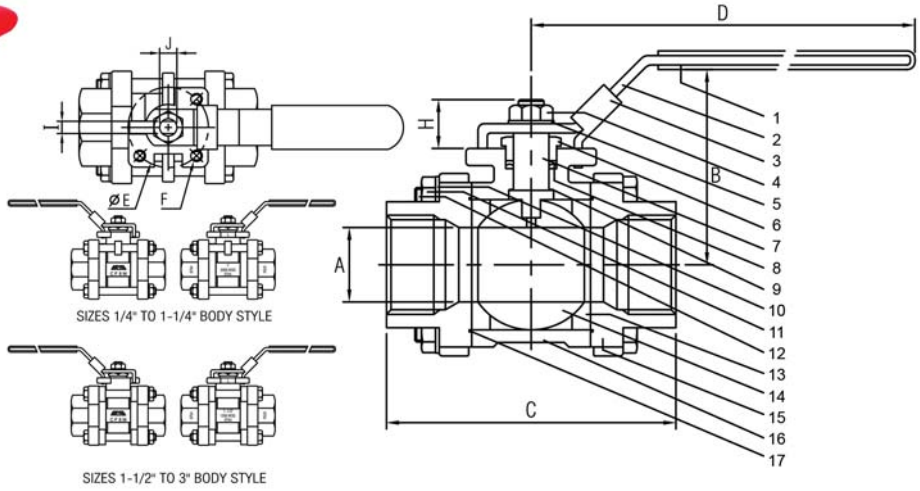
DIMENSIONS										
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	mm/in **F**	mm/in **G**	**ISO 5211**	WEIGHT KGS/ LBS
15	**1/2"**	15.0	10.0	67.30	36.3	9.0	42.0	36.0	F03 / F04	0.530
		0.590	0.394	2.650	1.429	0.354	1.653	1.417		1.166
20	**3/4"**	20.0	10.0	72.60	39.5	9.0	42.0	36.0	F03 / F04	0.680
		0.787	0.394	2.858	1.555	0.354	1.653	1.417		1.496
25	**1"**	24.0	11.0	87.75	50.5	11.0	70.0	50.0	F05 / F07	1.030
		0.945	0.433	3.455	1.988	0.433	2.756	1.968		2.266
32	**1 1/4"**	31.8	11.0	104.4	56.0	11.0	70.0	50.0	F05 / F07	1.720
		1.252	0.433	4.110	2.205	0.433	2.756	1.968		3.784
40	**1 1/2"**	38.1	17.0	116.35	70.6	14.0	70.0	50.0	F05 / F07	2.490
		1.500	0.669	4.581	2.779	0.551	2.756	1.968		5.478
50	**2"**	50.0	17.0	131.9	79.0	14.0	70.0	50.0	F05 / F07	3.800
		1.968	0.669	5.193	3.110	0.551	2.756	1.968		8.360

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

G Series Investment Cast Stainless Steel 316 & 317 Ball Valves

G3/G3-7

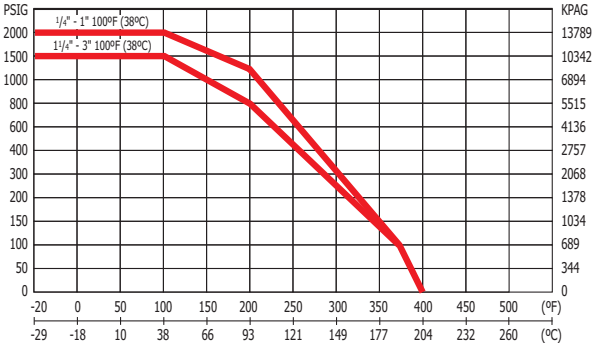




- Full port
- NPT ends to ANSI B1.20.1
- Three piece body
- Blowout-proof stem
- Adjustable packing gland
- Locking lever handle
- ISO 5211 mounting pad
- 2000 PSI, WOG 1/4" to 1"
- 1500 PSI, WOG 1-1/4" to 3"
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156

NAME / MATERIAL			
NO.	**PART NAME**	**MATERIAL G3**	**MATERIAL G3 -7**
1	Handle Grip	Vinyl	Vinyl
2	Handle	A276 TYPE 304	A276 TYPE 304
3	Locking Device	A276 TYPE 304	A276 TYPE 304
4	Handle Nut	A276 TYPE 304	A276 TYPE 304
5	Stem Washer	A276 TYPE 304	A276 TYPE 304
6	Gland Nut	A276 TYPE 304	A276 TYPE 304
7	Stem	A276 TYPE 316	A351 GRADE CG8M
8	Packing	PTFE	PTFE
9	Thrust Washer	R-PTFE 15% GLASS-FILLED	R-PTFE 15% GLASS-FILLED
10	Bolt Washer	A276 TYPE 304	A276 TYPE 304
11	Hex Nut	A194 GRADE 8	A194 GRADE 8
12	Bolt	A193 GRADE B8	A193 GRADE B8
13	Seat	R-PTFE 15% GLASS-FILLED	R-PTFE 15% GLASS-FILLED
14	Ball	A351 GRADE CF8M	A351 GRADE CG8M
15	Cap	A351 GRADE CF8M	A351 GRADE CG8M
16	Body	A351 GRADE CF8M	A351 GRADE CG8M
17	Gasket	PTFE	PTFE

PRESSURE TEMPERATURE RATING

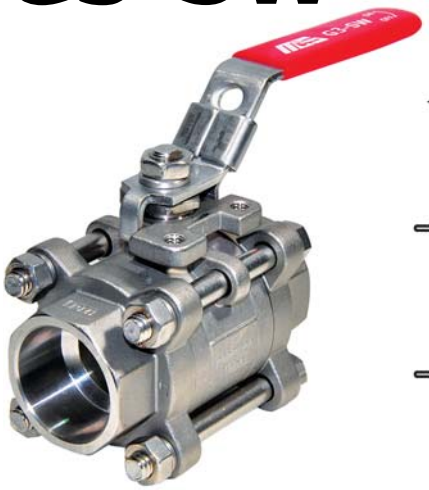


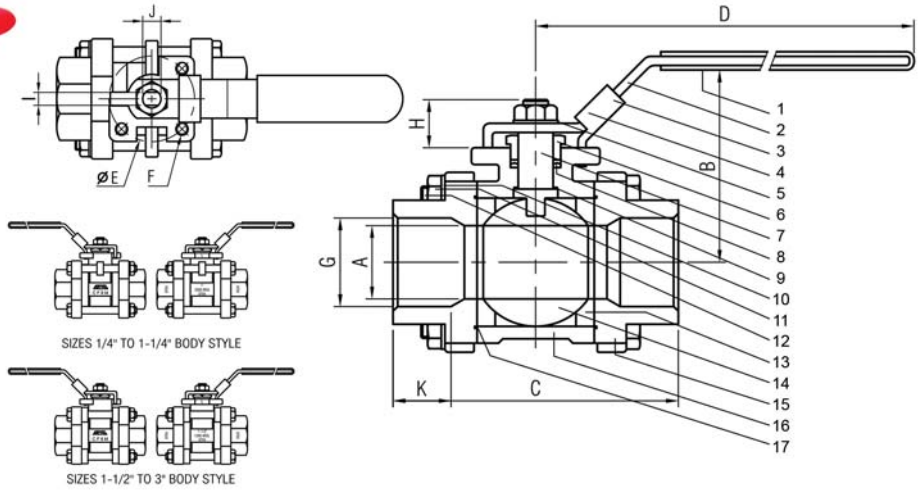
DIMENSIONS													
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	**F**	mm/in **H**	mm/in **I**	mm/in **J**	**CV**	WEIGHT KGS/ LBS
8	**1/4"**	9.5	67	60	120	36	M6	11.50	5.50	7.70	10	0.434
		0.374	2.638	2.362	4.724	1.417		0.453	0.217	0.303		0.955
10	**3/8"**	9.5	67	60	120	36	M6	12.50	5.50	7.70	10	0.420
		0.374	2.638	2.362	4.724	1.417		0.492	0.217	0.303		0.924
15	**1/2"**	15	68.5	70	120	36	M6	14.50	5.50	7.70	26	0.620
		0.591	2.697	2.756	4.724	1.417		0.571	0.217	0.303		1.364
20	**3/4"**	20	75	76	139	42	M6	18.00	6.50	9.30	50	0.910
		0.787	2.953	2.992	5.472	1.653		0.709	0.256	0.367		2.002
25	**1"**	25	79	92	139	42	M6	18.00	6.50	9.30	68	1.190
		0.984	3.110	3.622	5.472	1.653		0.709	0.256	0.367		2.618
32	**1 1/4"**	32	88.5	105	193	50	M8	23.50	8.00	12.50	120	1.930
		1.260	3.484	4.134	7.598	1.968		0.925	0.315	0.492		4.246
40	**1 1/2"**	38	94.5	120	193	70	M8	22.50	8.00	12.50	170	2.780
		1.496	3.720	4.724	7.598	2.756		0.886	0.315	0.492		6.116
50	**2"**	50.5	107	138	193	70	M8	25.00	10.00	15.60	360	4.750
		1.988	4.213	5.433	7.598	2.756		0.984	0.394	0.614		10.450
65	**2 1/2"**	65	129.5	170.5	244	102	M8	32.50	12.00	18.80	510	8.630
		2.559	5.098	6.713	9.606	4.016		1.280	0.472	0.740		18.986
80	**3"**	78	139.5	191	244	102	M8	31.00	12.00	18.80	900	13.460
		3.071	5.492	7.520	9.606	4.016		1.220	0.472	0.740		29.612

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

G Series Investment Cast Stainless Steel Ball Valves

G3-SW



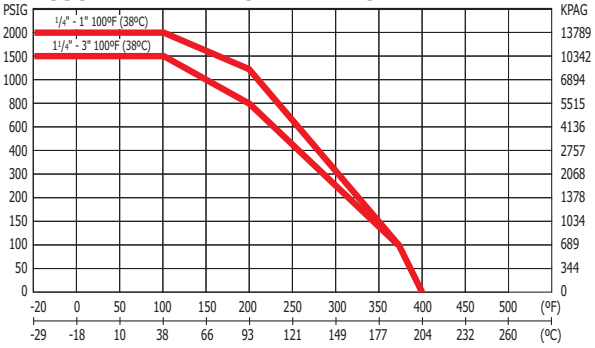


- Full port
- Socket Weld ends to ANSI B16.11
- Three piece body
- Blowout-proof stem
- Adjustable packing gland
- Locking lever handle
- ISO 5211 mounting pad
- 2000 PSI, WOG 1/4" to 1"
- 1500 PSI, WOG 1-1/4" to 3"
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156

Optional model G3-BW (Butt-Weld end) available on request

NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle Grip	Vinyl
2	Handle	A276 TYPE 304
3	Locking Device	A276 TYPE 304
4	Handle Nut	A276 TYPE 304
5	Stem Washer	A276 TYPE 304
6	Gland Nut	A276 TYPE 304
7	Stem	A276 TYPE 316
8	Packing	PTFE
9	Thrust Washer	R-PTFE 15% GLASS-FILLED
10	Bolt Washer	A276 TYPE 304
11	Hex Nut	A194 GRADE 8
12	Bolt	A193 GRADE B8
13	Seat	R-PTFE 15% GLASS-FILLED
14	Ball	A351 GRADE CF8M
15	Cap	A351 GRADE CF3M
16	Body	A351 GRADE CF8M
17	Gasket	PTFE

PRESSURE TEMPERATURE RATING



DIMENSIONS																
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	**F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	mm/in **K**	**CV**	WEIGHT KGS/ LBS
8	**1/4"**	9.5	67	60	120	36	M6	14.2	11.50	5.50	7.70	12	10	0.415
		0.374	2.638	2.362	4.724	1.417		0.559	0.453	0.217	0.303	0.472		0.913
10	**3/8"**	9.5	67	60	120	36	M6	17.6	12.50	5.50	7.70	12	10	0.400
		0.374	2.638	2.362	4.724	1.417		0.693	0.492	0.217	0.303	0.472		0.880
15	**1/2"**	15	68.5	70	120	36	M6	21.7	14.50	5.50	7.70	17	26	0.600
		0.591	2.697	2.756	4.724	1.417		0.854	0.571	0.217	0.303	0.669		1.320
20	**3/4"**	20	75	76	139	42	M6	27.1	18.00	6.50	9.30	17	50	0.880
		0.787	2.953	2.992	5.472	1.653		1.067	0.709	0.256	0.367	0.669		1.936
25	**1"**	25	79	92	139	42	M6	33.8	18.00	6.50	9.30	19	68	1.150
		0.984	3.110	3.622	5.472	1.653		1.330	0.709	0.256	0.367	0.748		2.530
32	**1 1/4"**	32	88.5	105	193	50	M8	42.6	23.50	8.00	12.50	21	120	1.870
		1.260	3.484	4.134	7.598	1.968		1.677	0.925	0.315	0.492	0.827		4.114
40	**1 1/2"**	38	94.5	120	193	70	M8	48.7	22.50	8.00	12.50	23	170	2.670
		1.496	3.720	4.724	7.598	2.756		1.917	0.886	0.315	0.492	0.906		5.874
50	**2"**	50.5	107	138	193	70	M8	61.0	25.00	10.00	15.60	24	360	4.620
		1.988	4.213	5.433	7.598	2.756		2.402	0.984	0.394	0.614	0.945		10.164
65	**2 1/2"**	65	129.5	170.5	244	102	M8	73.8	32.50	12.00	18.80	31	510	8.250
		2.559	5.098	6.713	9.606	4.016		2.906	1.280	0.472	0.740	1.22		18.150
80	**3"**	78	139.5	191	244	102	M8	90.0	31.00	12.00	18.80	32	900	13.000
		3.071	5.492	7.520	9.606	4.016		3.543	1.220	0.472	0.740	1.26		28.600

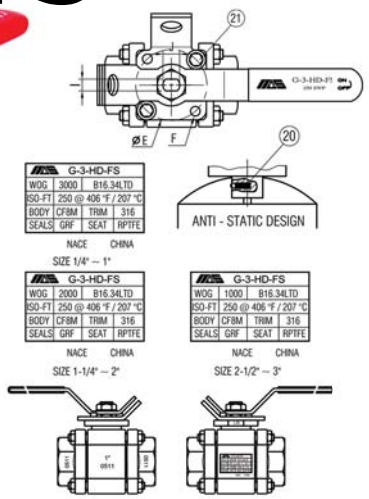
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

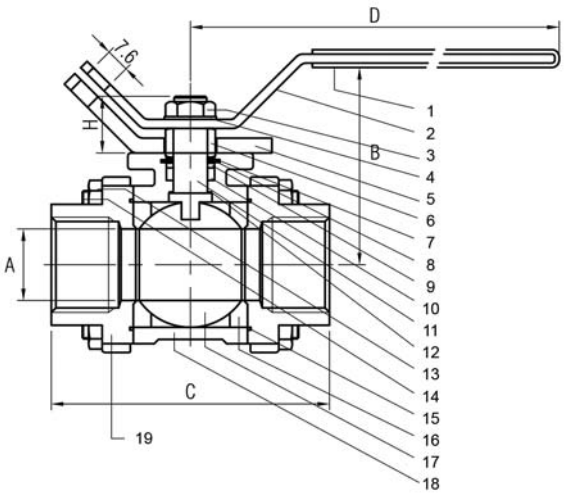
G Series
Investment Cast Stainless Steel API 607 Ball Valves

G3-HD-FS

2.10





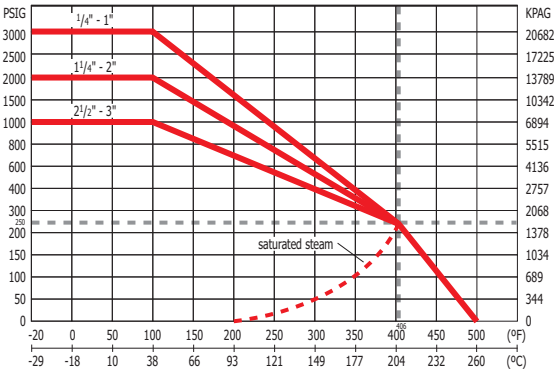


- Full port / Floating ball
- NPT threads to ANSI B1.20.1
- 3 piece body with blowout-proof stem
- Encapsulated bolt design
- Adjustable live loaded packing nut
- **250 PSIG saturated steam rated**
- Fire-safe certified to API 607
- Anti-static design
- Positive Lock-out device
- ISO 5211 mounting pad
- 3000 PSI, WOG from 1/4" to 1"
- 2000 PSI, WOG from 1-1/4" to 2"
- 1000 PSI, WOG from 2-1/2" to 3"
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156

Also available;
- **Model G-3-HD-FS-TSW (NPT x SW ends)**
- **Model G-3-HD-FS-SW (SW ends)**

NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle Grip	Vinyl
2	Handle	A276 TYPE 304
3	Handle Nut	A276 TYPE 304
4	Handle Washer	A276 TYPE 304
5	Lock-Out Plate	A276 TYPE 304
6	Gland Nut	A276 TYPE 304
7	Lock Washer	A276 TYPE 304
8	Belleville Washer	S.S.301
9	Gland	A276 TYPE 304
10	Packing	GRAPHITE
11	Stem	A276 TYPE 316
12	Thrust Washer	R-PTFE (TFM4215)
13	Hex Nut	A194 GRADE 8MA
14	Stud Bolt	A193 GRADE B8MA
15	Gasket	S.S. 304 + GRAPHITE
16	Seat	R-PTFE (TFM4215)
17	Ball	A351 GRADE CF8M
18	Body	A351 GRADE CF8M
19	Cap	A351 GRADE CF8M
20	Spring & pin	A276 TYPE 304
21	Stopper	A276 TYPE 304

PRESSURE TEMPERATURE RATING



DIMENSIONS													
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	mm/in **H**	mm/in **I**	mm/in **J**	mm/in **F**	ISO 5211 FLANGE TYPE	**CV**	WEIGHT KGS/ LBS
8	**1/4"**	10	65.8	64.5	120	36	15.5	5.5	8.1	M6	F03	11	0.68
		0.37	2.59	2.54	4.72	1.417	0.61	0.22	0.32				1.499
10	**3/8"**	10	65.8	64.5	120	36	15.5	5.5	8.1	M6	F03	11	0.68
		0.37	2.59	2.54	4.72	1.417	0.61	0.22	0.32				1.499
15	**1/2"**	15	68.5	68.5	120	36	15.5	5.5	8.1	M6	F03	26	0.82
		0.50	2.70	2.70	4.72	1.417	0.61	0.22	0.32				1.808
20	**3/4"**	20	75	80.5	139	42	18.5	6.5	9.6	M6	F04	50	1.35
		0.75	2.95	3.17	5.47	1.654	0.73	0.26	0.38				2.976
25	**1"**	25	79	91.5	139	42	18.5	6.5	9.6	M6	F04	68	1.82
		1.00	3.11	3.60	5.47	1.654	0.73	0.26	0.38				4.012
32	**1 1/4"**	32	88.5	100.5	193	50	23.5	8	12.8	M8	F05	120	2.81
		1.25	3.48	3.96	7.60	1.969	0.93	0.32	0.50				6.195
40	**1 1/2"**	38	94.5	117	193	70	23.5	8	12.8	M8	F07	170	4.64
		1.50	3.72	4.61	7.60	2.756	0.93	0.32	0.50				10.299
50	**2"**	50	107	133.5	193	70	27.0	10	16.1	M8	F07	360	7.64
		2.00	4.21	5.26	7.60	2.756	1.06	0.39	0.63				16.843
65	**2 1/2"**	65	129.5	157.8	244	102	30.0	12	19.25	M8	F10	510	10.77
		2.50	5.10	6.21	9.61	4.016	1.18	0.47	0.76				23.744
80	**3"**	78	139.5	178	244	102	30.0	12	19.25	M8	F10	900	15.70
		3.00	5.49	7.01	9.61	4.016	1.18	0.47	0.76				34.612

Technical data, dimensions, materials & specifications are subject to change without notice. MAS CA JUNE 18 2018

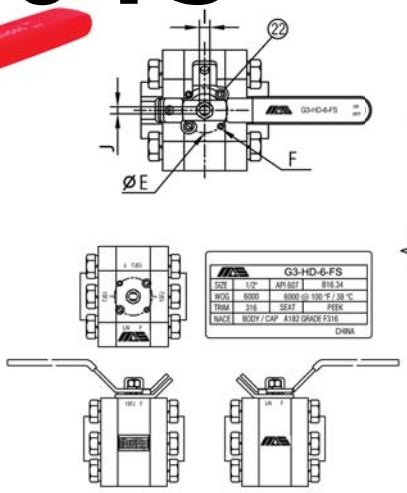
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

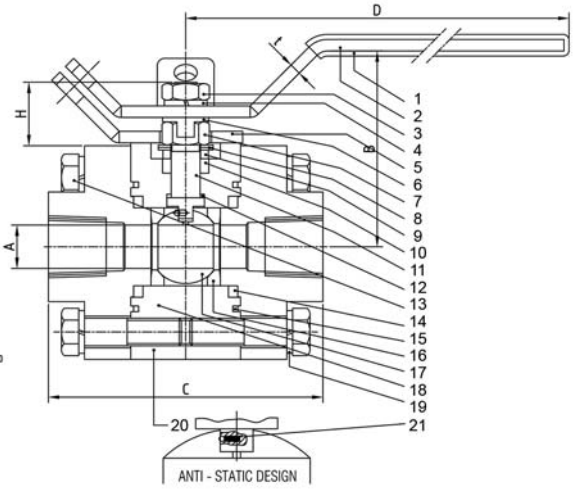
G Series
Forged Stainless Steel
6000 WOG Ball Valves
API 607

G3-HD-6-FS

2.11



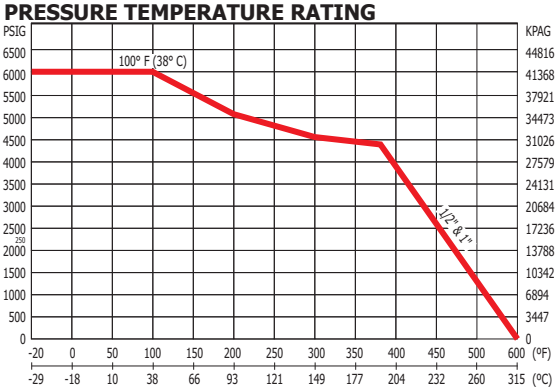




- ASME B16.34 class 2500 Design
- 3 piece forged body
- Full port
- NPT threads to ANSI B1.20.1
- Blowout proof stem
- Adjustable live loaded packing nut
- Anti-static design
- **Fire-safe certified to API-607**
- Positive lock-out device
- ISO 5211 mounting pad
- 6000 WOG (class 2500)
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156

NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle Grip	Vinyl
2	Handle	A276 TYPE 304
3	Handle Nut	A276 TYPE 304
4	Handle Washer	A276 TYPE 304
5	Lock-Out Plate	A276 TYPE 304
6	Lock Washer	A276 TYPE 304
7	Gland Nut	A276 TYPE 304
8	Belleville Washer	S.S. 301
9	Gland	A276 TYPE 304
10	Packing	GRAPHITE
11	Stem	A276 TYPE 316
12	Thrust Washer	PEEK
13	Bolt	A193 GRADE B8MA
14	Gasket	S.S. 304 + GRAPHITE
15	Gasket	TFM1600
16	Seat	PEEK
17	Ball	A351 GRADE CF8M
18	Body	A182 GRADE F316
19	Washer	A276 TYPE 304
20	Cap	A182 GRADE F316
21	Spring & pin	A276 TYPE 304
22	Stopper	A276 TYPE 304

PRESSURE TEMPERATURE RATING



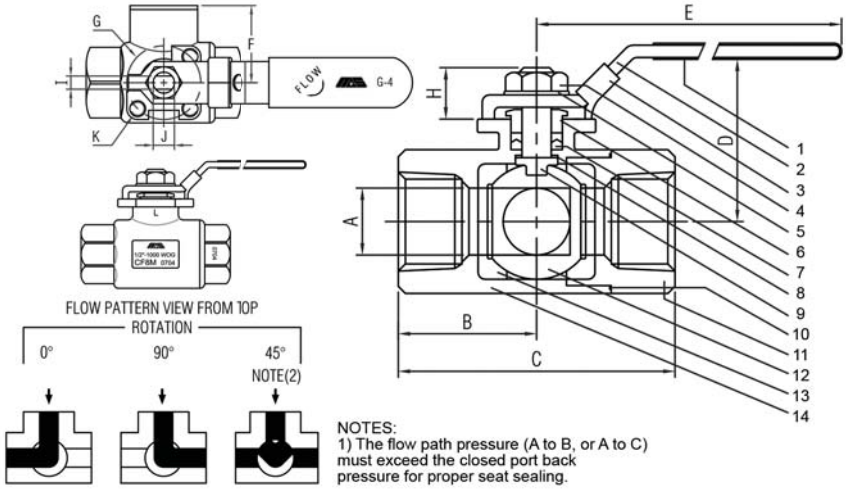
DIMENSIONS															
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	mm/in **H**	mm/in **I**	mm/in **J**	mm/in **t**	mm/in **F**	ISO 5211 FLANGE TYPE	**CV**	WEIGHT KGS/ LBS
15	**1/2"**	15	68	95	153	36	16	10	6	4	M5	F03	42	3.6
		0.590	2.677	3.740	6.023	1.417	0.787	0.394	0.236	0.157				7.9
25	**1"**	25	94	111	183	42	26.5	14	9	6	M5	F04	110	5.4
		1.00	3.700	4.370	7.204	1.654	1.043	0.551	0.354	0.235				11.9

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

G Series Investment Cast Stainless Steel 3 Port-Diverter Ball Valves

G4



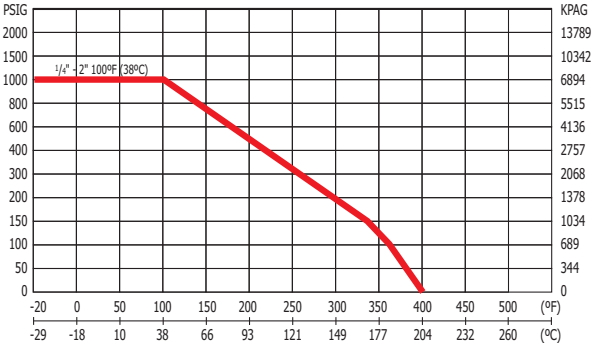


NOTES:
1) The flow path pressure (A to B, or A to C) must exceed the closed port back pressure for proper seat sealing.

- Three way L-port
- Reduced port
- NPT ends to ANSI B1.20.1
- Two piece body with floating ball
- Blowout-proof stem
- Adjustable packing gland
- Locking lever handle
- ISO 5211 mounting pad
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156
- 1000 PSI, WOG 1/4" to 2"

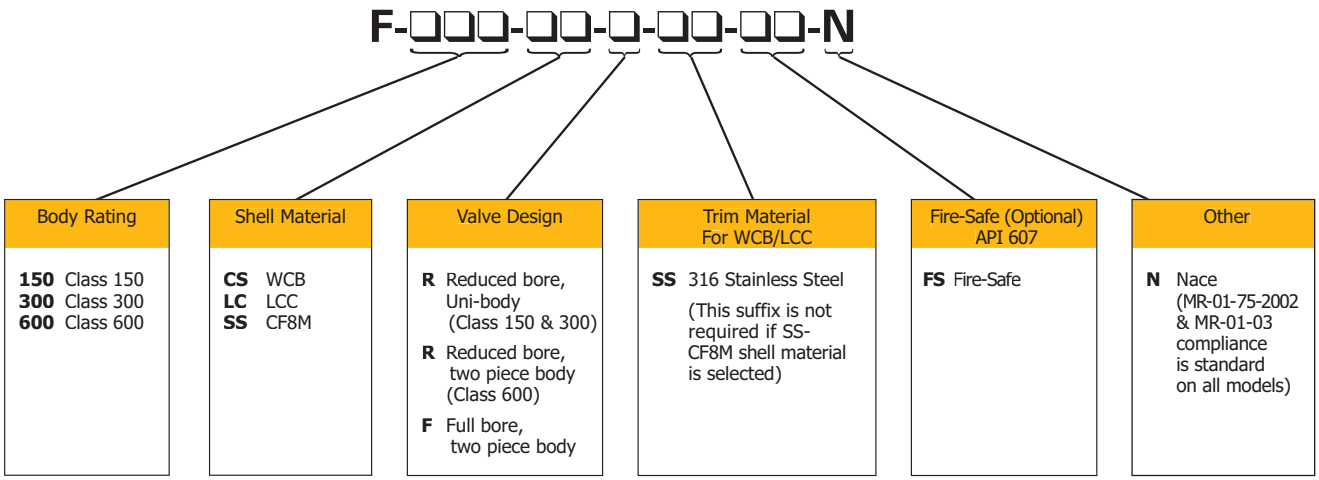
NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle Grip	Vinyl
2	Handle	A276 TYPE 304
3	Locking Device	A276 TYPE 304
4	Handle Nut	A276 TYPE 304
5	Stem Washer	A276 TYPE 304
6	Gland Nut	A276 TYPE 304
7	Packing	PTFE
8	Thrust Washer	R-PTFE 15% Glass-Filled
9	Stem	A276 TYPE 316
10	Gasket	PTFE
11	Cap	A351 GRADE CF8M
12	Ball	A351 GRADE CF8M
13	Seat	R-PTFE 15% Glass-Filled
14	Body	A351 GRADE CF8M

PRESSURE TEMPERATURE RATING



DIMENSIONS															
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	K	**CV**	WEIGHT KGS/ LBS
8	**1/4"**	11.1	29.35	58.70	50.80	100.0	30.00	36.00	15.30	5.45	7.70	M6x1.0	4	0.390
		0.44	1.16	2.31	2.00	3.94	1.18	1.42	0.60	0.22	0.30			0.858
10	**3/8"**	12.70	29.35	58.70	50.80	100.0	30.00	36.00	15.30	5.45	7.70	M6x1.0	5.4	0.360
		0.50	1.16	2.31	2.00	3.94	1.18	1.42	0.60	0.22	0.30			0.792
15	**1/2"**	12.7	29.35	58.70	50.80	100.0	30.00	36.00	15.30	5.45	7.70	M6x1.0	5.4	0.330
		0.50	1.16	2.31	2.00	3.94	1.18	1.42	0.60	0.22	0.30			0.726
20	**3/4"**	17.30	38.10	76.20	58.50	130.0	38.10	36.00	17.00	6.45	9.30	M6x1.0	12	0.660
		0.68	1.50	3.00	2.29	5.12	1.50	1.42	0.67	0.25	0.37			1.452
25	**1"**	20.60	40.75	82.00	62.35	130.0	42.67	42.00	18.40	6.45	9.30	M6x1.0	15	0.850
		0.81	1.60	3.23	2.46	5.12	1.68	1.65	0.72	0.25	0.37			1.870
32	**1 1/4"**	25.40	51.00	102.0	74.10	155.0	51.00	50.00	23.00	8.00	12.50	M8x1.25	21	1.490
		1.00	2.01	4.02	2.92	6.10	2.01	1.97	0.91	0.32	0.49			3.278
40	**1 1/2"**	31.80	55.50	111.0	78.85	155.0	61.00	50.00	23.00	8.00	12.50	M8x1.25	34	2.040
		1.25	2.19	4.37	3.10	6.10	2.40	1.97	0.91	0.32	0.49			4.488
50	**2"**	38.10	68.50	137.0	94.20	175.0	71.37	50.00	25.40	10.00	15.60	M8x1.25	47	3.160
		1.50	2.70	5.39	3.71	6.89	2.81	1.97	1.00	0.39	0.61			6.952

ORDERING CODES



The order code system lets you specify your pressure class, material, design (reduced or full port), trim materials and whether or not you require Fire-Safe materials to API 607 4th edition.

So for instance, a 150 pressure class in carbon steel with reduced port and stainless trims with fire-safe seals would be indicated as:

F-150-CS-R-SS-FS-N
Refer to the chart above for feature designations.

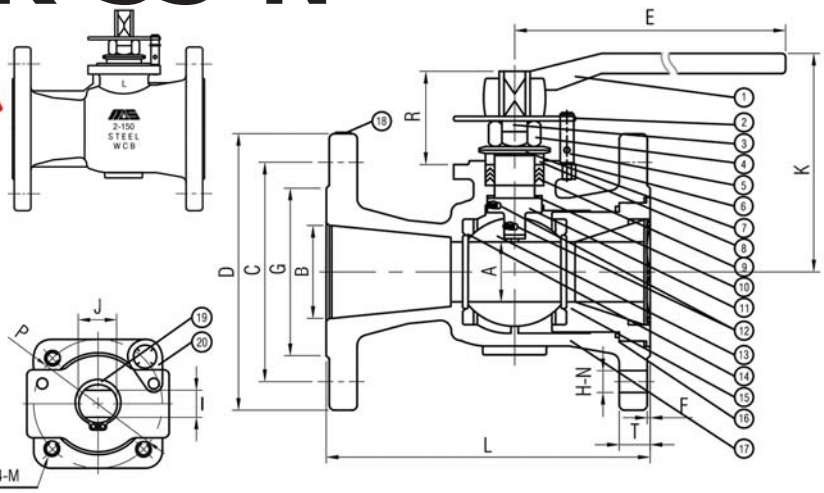
Please contact us for more information on:
- Special Trims
- Manual Operators
- Pneumatic Operators
- Electric Operators
- Control Packages

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

F Series
Flanged Carbon Steel
Ball Valves

F-150-CS-R-SS-N 3.2





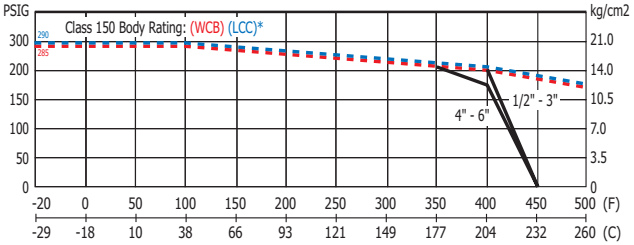
- Reduced port, One piece body
- ANSI B16.34 Class 150
- Blowout-proof stem
- ISO 5211 Mounting pad
- Floating Ball, Anti-static device
- Fire-safe design
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156

Model F-150-LC-R-SS-N (LCC body) is available

NAME / MATERIAL					
NO.	**PART NAME**	**MATERIAL**	**LC**	**FS***	**QTY**
1	HANDLE	DUCTILE IRON			1
2	STOPPER PLATE	A276 TYPE 304			1
3	LOCK WASHER	A276 TYPE 304			1
4	GLAND NUT	CARBON STEEL			1
5	STOPPER PIN	A276 TYPE 304			1
	3" & 4" ONLY	C.S.A108 GR 1045			1
6	LOCK WASHER	A276 TYPE 304			1
7	BELLEVILLE WASHER	S.S.301			2
8	GLAND	A276 TYPE 304			1
9	PACKING	PTFE		GRAPHITE	1 SET
10	THRUST WASHER	RPTFE 15% GFT			1
11	STEM	A276 TYPE 316			1
12	ANTI-STATIC DEVICE	A276 TYPE 304			2 SETS
13	BALL	A351 CF8M			1
14	SEAT	PTFE (TFM-1600)			2
15	BODY INSERT	A216 WCB	A352 LCC		1
16	BODY SEAL	PTFE		GRAPHITE	1
17	BODY	A216 WCB	A352 LCC		1
18	IDENTIFICATION PLATE	A276 TYPE 304			1
19	RETAINING RING	CARBON STEEL			1
20	LOCK PLATE	A276 TYPE 304			1

*Fire Safe Certified to API-607

PRESSURE TEMPERATURE RATING



*LCC body rated to -50F/-46C

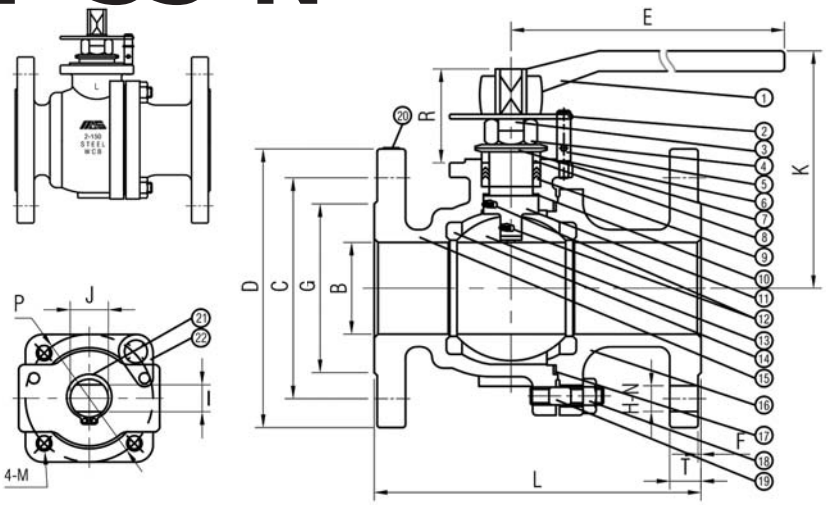
DIMENSIONS																			
SIZE	mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	mm/in **K**	mm/in **L**	in **M**	mm/in **N**	mm/in **P**	mm/in **T**	mm/in **R**	**ISO FLG**	WEIGHT KGS/LBS
2"	38	50	120.5	152	230	1.6	92	19	14	20	125	178	5/16-UNC	4	70	15.9	49	F07	8.00
	1.50	1.97	4.75	5.98	9.06	0.06	3.62	0.75	0.55	0.79	4.92	7.00			2.76	0.63	1.93		17.60
3"	58	76	152.5	190	400	1.6	127	19	17	25	168	203	3/8-UNC	4	70	19.1	59	F07	15.70
	2.28	3.00	6.00	7.48	15.75	0.06	5.00	0.75	0.67	0.98	6.61	8.00			2.76	0.75	2.32		34.54
4"	76	102	190.5	229	400	1.6	157	19	17	25	183	229	3/8-UNC	8	70	23.9	59	F07	24.60
	3.00	4.02	7.50	9.02	15.75	0.06	6.18	0.75	0.67	0.98	7.20	9.02			2.76	0.94	2.32		54.12
6"	114	152	241.5	279	750	1.6	216	22	23	34	245	267	1/2-UNC	8	125	25.4	73	F12	49.50
	4.49	5.98	9.50	10.98	29.53	0.06	8.50	0.88	0.91	1.34	9.65	10.51			4.92	1.00	2.87		108.90

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

F Series
Flanged Carbon Steel
Ball Valves

F-150-CS-F-SS-N 3.3

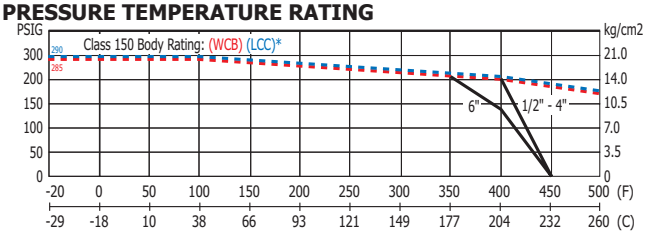




- Full port, Two piece body
- ANSI B16.34 Class 150
- Blowout-proof stem
- ISO 5211 Mounting pad
- Floating Ball, Anti-static device
- Fire-safe design
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156

Model F-150-LC-F-SS-N (LCC body) is available

PRESSURE TEMPERATURE RATING



*LCC body rated to -50F/-46C

NAME / MATERIAL					
NO.	**PART NAME**	**MATERIAL**	**LC**	**FS***	**QTY**
1	HANDLE	DUCTILE IRON			1
2	STOPPER PLATE	A276 TYPE 304			1
3	LOCK WASHER	A276 TYPE 304			1
4	GLAND NUT	CARBON STEEL			1
5	STOPPER PIN	A276 TYPE 304			1
6	LOCK WASHER	A276 TYPE 304			1
7	BELLEVILLE WASHER	S.S.301			2
8	GLAND	A276 TYPE 304			1
9	PACKING	PTFE		GRAPHITE	1 SET
10	THRUST WASHER	RPTFE 15% GFT			1
11	STEM	A276 TYPE 316			1
12	ANTI-STATIC DEVICE	A276 TYPE 304			2 SETS
13	BALL	A351 CF8M			1
14	SEAT	PTFE (TFM-1600)			2
15	BODY	A216 WCB	A352 LCC		1
16	CAP	A216 WCB	A352 LCC		1
17	BODY SEAL	PTFE		GRAPHITE	1
18	BOLT NUT	A194 GRADE 2HM	A194 7M		1 SET
19	STUD BOLT	A193 GRADE B7M	A320 GRADE L7M		1 SET
20	IDENTIFICATION PLATE	A276 TYPE 304			1
21	RETAINING RING	CARBON STEEL			1
22	LOCK PLATE	A276 TYPE 304			1

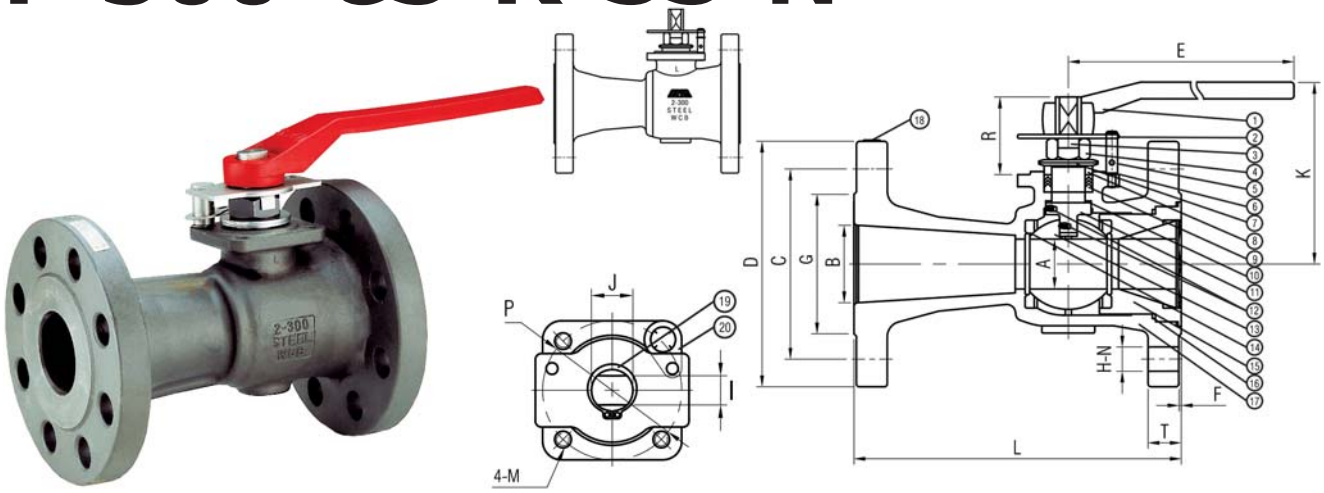
*Fire Safe Certified to API-607

DIMENSIONS																		
SIZE	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	mm/in **K**	mm/in **L**	in **M**	mm/in **N**	mm/in **P**	mm/in **T**	mm/in **R**	**ISO FLG**	WEIGHT KGS/LBS
1/2"	15	60.5	89	130	1.6	35	16	8	11	83	108	1/4-UNC	4	36	11.2	27	F03	1.64
	0.59	2.38	3.50	5.12	0.06	1.38	0.62	0.31	0.43	3.27	4.25			1.42	0.44	1.06		3.60
3/4"	19	70	98.5	130	1.6	43	16	8	11	86	117	1/4-UNC	4	36	11.2	27	F03	2.00
	0.75	2.75	3.88	5.12	0.06	1.69	0.62	0.31	0.43	3.39	4.62			1.42	0.44	1.06		4.40
1"	24	79	108	160	1.6	51	16	10	14	104	127	1/4-UNC	4	50	11.2	35.5	F05	3.15
	0.95	3.12	4.25	6.30	0.06	2.00	0.62	0.39	0.55	4.09	5.00			1.97	0.44	1.40		6.93
1 1/2"	38	98.5	127	230	1.6	73	16	14	20	125	165	5/16-UNC	4	70	14.3	49	F07	6.26
	1.50	3.88	5.00	9.06	0.06	2.88	0.62	0.55	0.79	4.92	6.50			2.76	0.56	19.3		13.77
2"	50	120.5	152	230	1.6	92	19	14	20	134.5	178	5/16-UNC	4	70	15.9	49	F07	9.30
	1.97	4.75	5.98	9.06	0.06	3.62	0.75	0.55	0.79	5.30	7.00			2.76	0.63	1.93		20.46
2 1/2"	65	139.7	178	400	1.6	104.6	19	17	25	170.5	190.5	5/16-UNC	4	102	17.5	61	F10	16.82
	2.56	5.50	7.00	15.75	0.06	4.12	0.75	0.67	0.98	6.71	7.50			4.02	0.69	2.40		37.00
3"	76	152.5	190	400	1.6	127	19	17	25	181.5	203	3/8-UNC	4	102	19.1	61	F10	22.00
	3.00	6.00	7.48	15.75	0.06	5.00	0.75	0.67	0.98	7.15	8.00			4.02	0.75	2.40		48.40
4"	100	190.5	229	460	1.6	157	19	23	34	205.5	229	1/2-UNC	8	125	23.9	73	F12	37.00
	3.94	7.50	9.02	18.11	0.06	6.18	0.75	0.91	1.34	8.09	9.02			4.92	0.94	2.87		81.40
6"	150	241.5	279	1000	1.6	216	22	27	40	289.5	394	5/8-UNC	8	140	25.4	90	F14	85.30
	5.91	9.50	10.98	39.37	0.06	8.50	0.88	1.06	1.57	11.40	15.5			5.51	1.00	3.54		187.66

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

F Series
Flanged Carbon Steel
Ball Valves

F-300-CS-R-SS-N 3.4



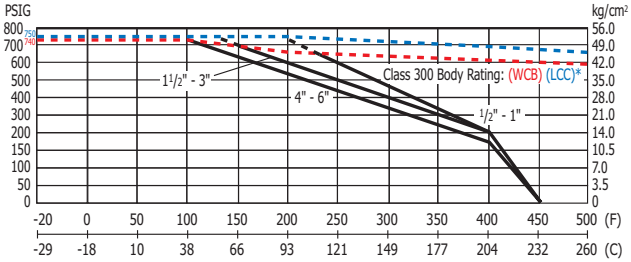
- Reduced port, One piece body
- ANSI B16.34 Class 300
- Blowout-proof stem
- ISO 5211 Mounting pad
- Floating Ball, Anti-static device
- Fire-safe design
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156

Model F-300-LC-R-SS-N (LCC body) is available

NAME / MATERIAL					
NO.	**PART NAME**	**MATERIAL**	**LC**	**FS***	**QTY**
1	HANDLE	DUCTILE IRON			1
2	STOPPER PLATE	A276 TYPE 304			1
3	LOCK WASHER	A276 TYPE 304			1
4	GLAND NUT	CARBON STEEL			1
5	STOPPER PIN	A276 TYPE 304			1
6	LOCK WASHER	A276 TYPE 304			1
7	BELLEVILLE WASHER	S.S.301			2
8	GLAND	A276 TYPE 304			1
9	PACKING	PTFE		GRAPHITE	1 SET
10	THRUST WASHER	RPTFE 15% GFT			1
11	STEM	A276 TYPE 316			1
12	ANTI-STATIC DEVICE	A276 TYPE 304			2 SETS
13	BALL	A351 CF8M			1
14	SEAT	PTFE (TFM-1600)			2
15	BODY INSERT	A216 WCB	A352 LCC		1
16	BODY SEAL	PTFE		GRAPHITE	1
17	BODY	A216 WCB	A352 LCC		1
18	IDENTIFICATION PLATE	A276 TYPE 304			1
19	RETAINING RING	CARBON STEEL			1
20	LOCK PLATE	A276 TYPE 304			1

*Fire Safe Certified to API-607

PRESSURE TEMPERATURE RATING



*LCC body rated to -50F/-46C

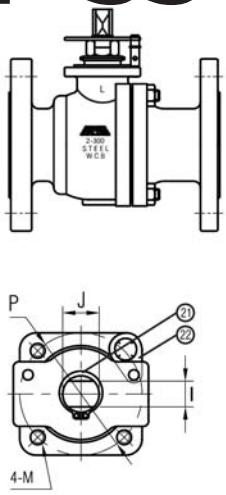
DIMENSIONS																					
SIZE	mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	mm/in **K**	mm/in **L**	in **M**	mm/in **N**	mm/in **P**	mm/in **T**	mm/in **R**	**ISO FLG**	**CV**	WEIGHT KGS/LBS
2"	38	50	127	165	230	1.6	92	19	14	20	125	216	5/16-UNC	8	70	22.3	49	F07	150	11.19
	1.50	1.97	5.00	6.50	9.06	0.06	3.62	0.75	0.55	0.79	4.92	8.50			2.76	0.88	1.93			24.62
3"	58	76	168	210	400	1.6	127	22	17	25	168	283	3/8-UNC	8	70	28.5	59	F07	350	23.47
	2.28	3.00	6.61	8.27	15.75	0.06	5.00	0.88	0.67	0.98	6.61	11.14			2.76	1.12	2.32			51.63
4"	76	102	200	254	400	1.6	157	22	17	25	183	305	3/8-UNC	8	70	31.8	59	F07	500	35.72
	3.00	4.02	7.87	10.00	15.75	0.06	6.18	0.88	0.67	0.98	7.20	12.00			2.76	1.25	2.32			78.58
6"	114	152	270	318	750	1.6	216	22	23	34	245	403	1/2-UNC	12	125	36.6	73	F12	1200	79.21
	4.49	5.98	10.63	12.52	29.53	0.06	8.50	0.88	0.91	1.34	9.65	15.87			4.92	1.44	2.87			174.26

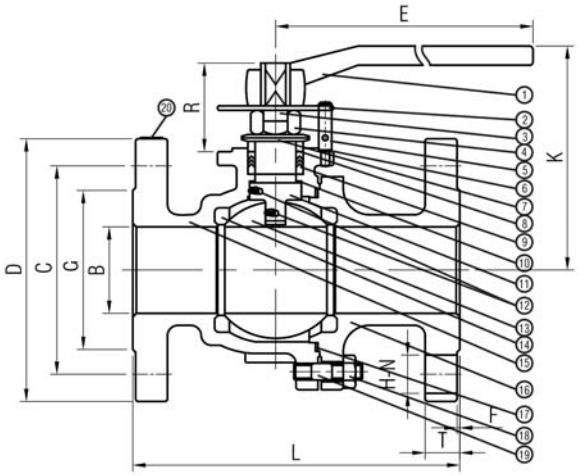
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

F Series
Flanged Carbon Steel
Ball Valves

F-300-CS-F-SS-N 3.5



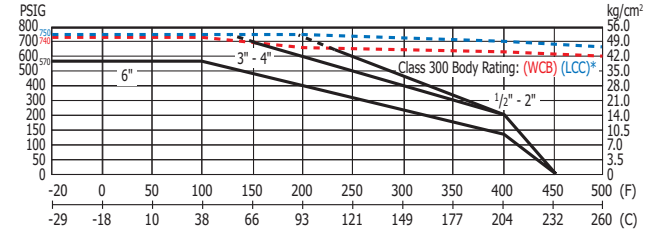




- Full port, Two piece body
- ANSI B16.34 Class 300
- Blowout-proof stem
- ISO 5211 Mounting pad
- Floating Ball, Anti-static device
- Fire-safe design
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156

Model F-300-LC-F-SS-N (LCC body) is available

PRESSURE TEMPERATURE RATING



*LCC body rated to -50F/-46C

NAME / MATERIAL					
NO.	**PART NAME**	**MATERIAL**	**LC**	**FS***	**QTY**
1	HANDLE	DUCTILE IRON			1
2	STOPPER PLATE	A276 TYPE 304			1
3	LOCK WASHER	A276 TYPE 304			1
4	GLAND NUT	CARBON STEEL			1
5	STOPPER PIN	A276 TYPE 304			1
6	LOCK WASHER	A276 TYPE 304			1
7	BELLEVILLE WASHER	S.S. 301			2
8	GLAND	A276 TYPE 304			1
9	PACKING	PTFE		GRAPHITE	1 SET
10	THRUST WASHER	RPTFE 15% GFT			1
11	STEM	A276 TYPE 316			1
12	ANTI-STATIC DEVICE	A276 TYPE 304			2 SETS
13	BALL	A351 CF8M			1
14	SEAT	PTFE (TFM-1600)			2
15	BODY	A216 WCB	A352 LCC		1
16	CAP	A216 WCB	A352 LCC		1
17	BODY SEAL	PTFE		GRAPHITE	1
18	BOLT NUT	A194 GRADE 2HM	A194 GRADE 7M		1 SET
19	STUD BOLT	A193 GRADE B7M	A320 GRADE L7M		1 SET
20	IDENTIFICATION PLATE	A276 TYPE 304			1
21	RETAINING RING	CARBON STEEL			1
22	LOCK PLATE	A276 TYPE 304			1

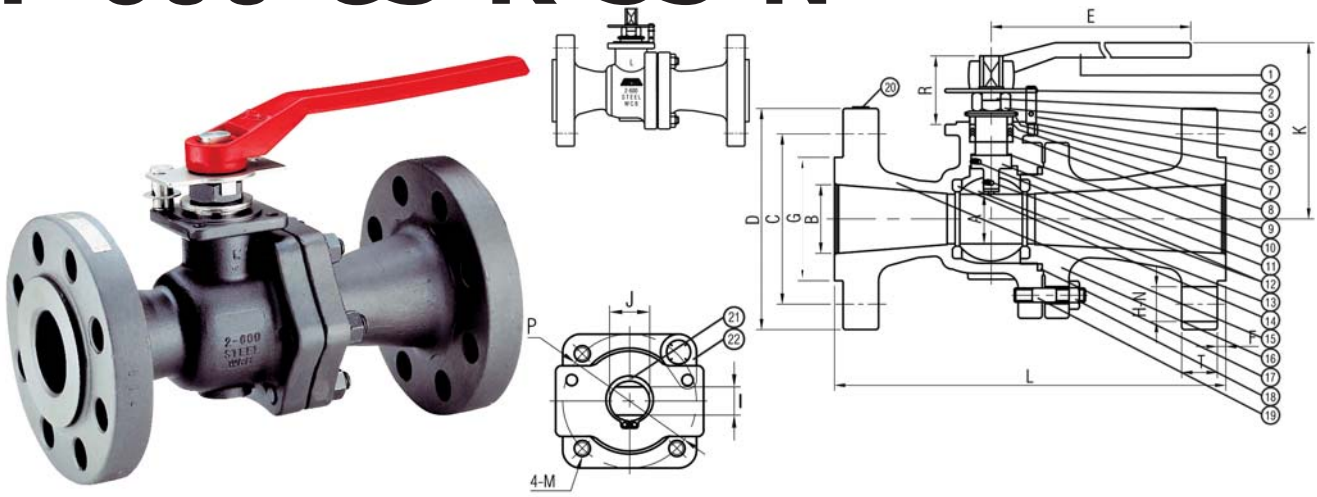
*Fire Safe Certified to API-607

DIMENSIONS																			
SIZE	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	mm/in **K**	mm/in **L**	in **M**	mm/in **N**	mm/in **P**	mm/in **T**	mm/in **R**	**ISO FLG**	**CV**	WEIGHT KGS/LBS
1/2"	15	66.5	95	130	1.6	35	16	8	11	83	140	1/4-UNC	4	36	14.2	27	F03	15	2.20
	0.59	2.62	3.75	5.12	0.06	1.38	0.62	0.31	0.43	3.27	5.50			1.42	0.56	1.06			4.84
3/4"	19	82.5	117	130	1.6	43	19	8	11	86	152.5	1/4-UNC	4	36	15.8	27	F03	35	3.29
	0.75	3.25	4.62	5.12	0.06	1.69	0.75	0.31	0.43	3.39	6.00			1.42	0.62	1.06			7.23
1"	24	89	124	160	1.6	51	19	10	14	104	165	1/4-UNC	4	50	17.5	35.5	F05	60	4.76
	0.95	3.50	4.88	6.30	0.06	2.00	0.75	0.39	0.55	4.09	6.50			1.97	0.69	1.40			10.47
1 1/2"	38	114.5	156	230	1.6	73	22	14	20	125	190.5	5/16-UNC	4	70	20.6	49	F07	190	9.14
	1.50	4.50	6.14	9.06	0.06	2.88	0.88	0.55	0.79	4.92	7.50			2.76	0.81	1.93			20.10
2"	50	127	165	230	1.6	92	19	14	20	134.5	216	5/16-UNC	8	70	22.3	49	F07	320	12.80
	1.97	5.00	6.50	9.06	0.06	3.62	0.75	0.55	0.79	5.30	8.50			2.76	0.88	1.93			28.16
2 1/2"	65	149.4	190.5	400	1.6	104.6	22	17	25	170.5	241.3	3/8-UNC	8	102	25.4	61	F10	600	22.73
	2.56	5.88	7.50	15.75	0.06	4.12	0.88	0.67	0.98	6.71	9.50			4.02	1.00	2.40			50.00
3"	76	168	210	400	1.6	127	22	17	25	181.5	283	3/8-UNC	8	102	28.5	61	F10	960	29.60
	3.00	6.62	8.27	15.75	0.06	5.00	0.88	0.67	0.98	7.15	11.14			4.02	1.12	2.40			65.12
4"	100	200	254	750	1.6	157	22	23	34	205.5	305	1/2-UNC	8	125	31.8	73	F12	1650	50.40
	3.94	7.87	10.00	29.53	0.06	6.18	0.88	0.91	1.34	8.09	12.00			4.92	1.25	2.87			110.88
6"	150	270	318	1000	1.6	216	22	27	40	289.5	403	5/8-UNC	12	140	36.6	90	F14	4200	107.3
	5.91	10.63	12.52	39.37	0.06	8.50	0.88	1.06	1.57	11.40	15.87			5.51	1.44	3.54			236.06

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

F Series
Flanged Carbon Steel
Ball Valves

F-600-CS-R-SS-N 3.6



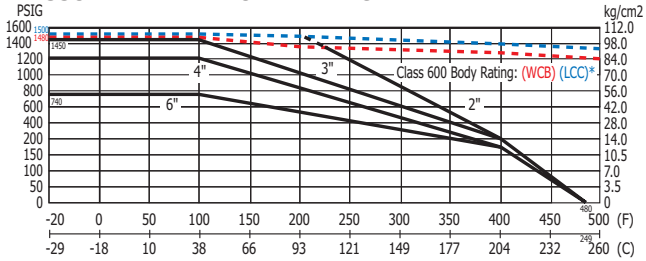
- Reduced port, Two piece body
- ANSI B16.34 Class 600
- ISO 5211 Mounting pad
- Floating Ball
- Anti-static device
- Fire-safe design
- Blowout-proof stem
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156

Model F-600-LC-R-SS-N (LCC body) is available

NAME / MATERIAL					
NO.	**PART NAME**	**MATERIAL**	**LC**	**FS***	**QTY**
1	HANDLE	DUCTILE IRON			1
2	STOPPER PLATE	A276 TYPE 304			1
3	LOCK WASHER	A276 TYPE 304			1
4	GLAND NUT	CARBON STEEL			1
5	STOPPER PIN	A276 TYPE 304			1
6	LOCK WASHER	A276 TYPE 304			1
7	BELLEVILLE WASHER	S.S. 301			2
8	GLAND	A276 TYPE 304			1
9	PACKING	PTFE		GRAPHITE	1 SET
10	THRUST WASHER	RPTFE 15% GFT			1
11	STEM	A276 TYPE 316			1
12	ANTI-STATIC DEVICE	A276 TYPE 304			2 SETS
13	BALL	A351 CF8M			1
14	SEAT	PTFE+25% CARBON			2
15	BODY	A216 WCB	A352 LCC		1
16	CAP	A216 WCB	A352 LCC		1
17	BODY SEAL	304+GRAPHITE			1
18	BOLT NUT	A194 GRADE 2HM	A194 GRADE 7M		1 SET
19	STUD BOLT	A193 GRADE B7M	A320 GRADE L7M		1 SET
20	IDENTIFICATION PLATE	A276 TYPE 304			1
21	RETAINING RING	CARBON STEEL			1
22	LOCK PLATE	A276 TYPE 304			1

*Fire Safe Certified to API-607

PRESSURE TEMPERATURE RATING



*LCC body rated to -50F/-46C

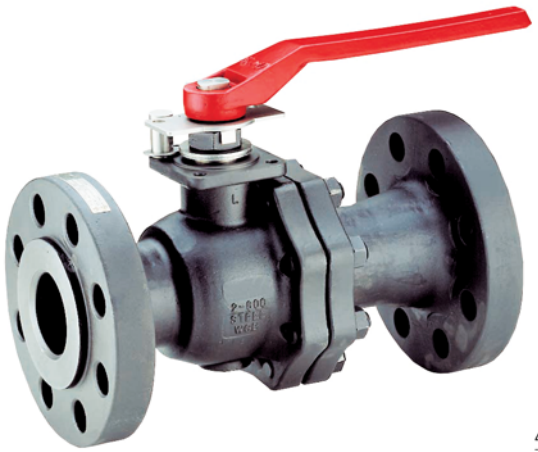
DIMENSIONS																				
SIZE	mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	mm/in **K**	mm/in **L**	in **M**	mm/in **N**	mm/in **P**	mm/in **T**	mm/in **R**	**ISO FLG**	WEIGHT KGS/LBS
2"	38	50	127	165	230	6.35	92	19	14	20	144.5	292	5/16-UNC	8	70	31.8	49	F07	15.72
	1.50	1.97	5.00	6.50	9.06	0.25	3.62	0.75	0.55	0.79	5.69	11.50			2.76	1.25	1.93		34.58
3"	58	76	168	210	400	6.35	127	22.3	17	25	180	356	3/8-UNC	8	70	38.1	59	F07	33.05
	2.28	3.00	6.61	8.27	15.75	0.25	5.00	0.88	0.67	0.98	7.09	14.02			2.76	1.50	2.32		72.71
4"	76	102	216	273	400	6.35	157	25.4	17	25	194	432	3/8-UNC	8	70	44.5	59	F07	61.64
	3.00	4.02	8.50	10.75	15.75	0.25	6.18	1.00	0.67	0.98	7.64	17.00			2.76	1.75	2.32		135.61
6"	114	152	292	356	750	6.35	216	28.5	23	34	256	559	1/2-UNC	12	125	54.1	73	F12	131.83
	4.49	5.98	11.50	14.02	29.53	0.25	8.50	1.12	0.91	1.34	10.08	22.00			4.92	2.13	2.87		290.03

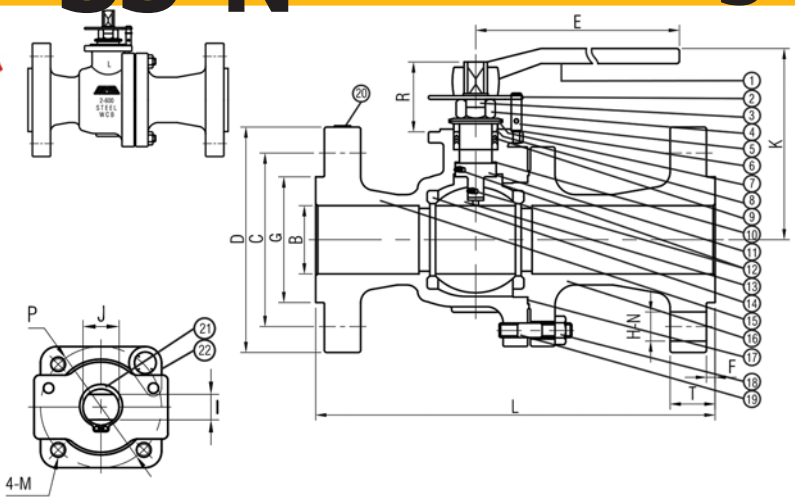
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

F Series
Flanged Carbon Steel
Ball Valves

F-600-CS-F-SS-N

3.7





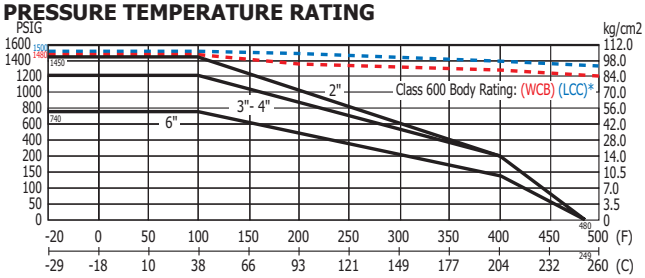
- Full port, Two piece body
- ANSI B16.34 Class 600
- ISO 5211 Mounting pad
- Floating Ball
- Anti-static device
- Fire-safe design
- Blowout-proof stem
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156

Model F-600-LC-F-SS-N (LCC body) is available

NAME / MATERIAL					
NO.	**PART NAME**	**MATERIAL**	**LC**	**FS***	**QTY**
1	HANDLE	DUCTILE IRON			1
2	STOPPER PLATE	A276 TYPE 304			1
3	LOCK WASHER	A276 TYPE 304			1
4	GLAND NUT	CARBON STEEL			1
5	STOPPER PIN	A276 TYPE 304			1
6	LOCK WASHER	A276 TYPE 304			1
7	BELLEVILLE WASHER	S.S. 301			2
8	GLAND	A276 TYPE 304			1
9	PACKING	PTFE		GRAPHITE	1 SET
10	THRUST WASHER	RPTFE 15% GFT			1
11	STEM	A276 TYPE 316			1
12	ANTI-STATIC DEVICE	A276 TYPE 304			2 SETS
13	BALL	A351 CF8M			1
14	SEAT	PTFE+25%CARBON			2
15	BODY	A216 WCB	A352 LCC		1
16	CAP	A216 WCB	A352 LCC		1
17	BODY SEAL	304+ GRAPHITE			1
18	BOLT NUT	A194 GRADE 2HM	A194 GRADE 7M		1 SET
19	STUD BOLT	A193 GRADE B7M	A320 GRADE L7M		1 SET
20	IDENTIFICATION PLATE	A276 TYPE 304			1
21	RETAINING RING	CARBON STEEL			1
22	LOCK PLATE	A276 TYPE 304			1

*Fire Safe Certified to API-607

PRESSURE TEMPERATURE RATING



*LCC body rated to -50F/-46C

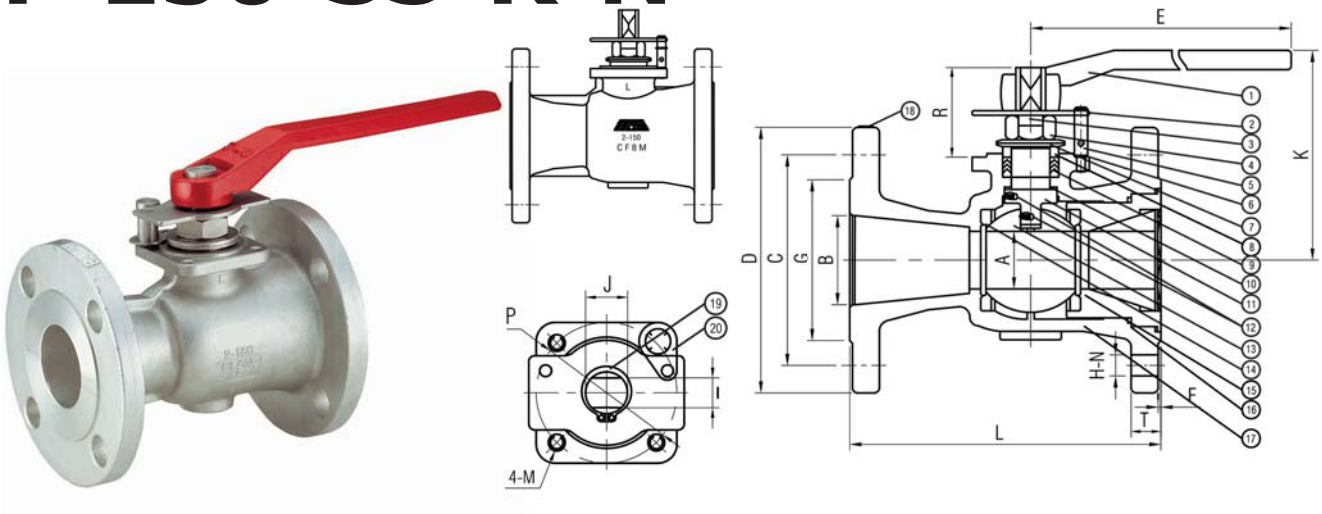
DIMENSIONS																			
SIZE	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	mm/in **K**	mm/in **L**	in **M**	mm/in **N**	mm/in **P**	mm/in **T**	mm/in **R**	**ISO FLG**	WEIGHT KGS/LBS
2"	50	127	165	230	6.35	92	19	14	20	158	292	5/16-UNC	8	70	31.8	49	F07	17.26
	1.97	5.00	6.50	9.06	0.25	3.62	0.75	0.55	0.79	6.22	11.50			2.76	1.25	1.93		37.97
3"	76	168	210	400	6.35	127	22.3	17	25	194	356	3/8-UNC	8	102	38.1	61	F10	39.25
	3.00	6.61	8.27	15.75	0.25	5.00	0.88	0.67	0.98	7.64	14.02			4.02	1.50	2.40		86.35
4"	100	216	273	460	6.35	157	25.4	23	34	215.5	432	1/2-UNC	8	125	44.5	73	F12	71.74
	3.94	8.50	10.75	18.11	0.25	6.18	1.00	0.91	1.34	8.48	17.00			4.92	1.75	2.87		157.83
6"	150	292	356	1000	6.35	216	28.5	27	40	301.5	559	5/8-UNC	12	140	54.1	90	F14	161.62
	5.91	11.50	14.02	39.37	0.25	8.50	1.12	1.06	1.57	11.87	22.00			5.51	2.13	3.54		355.56

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

F Series
Flanged Stainless Steel Ball Valves

F-150-SS-R-N

3.8

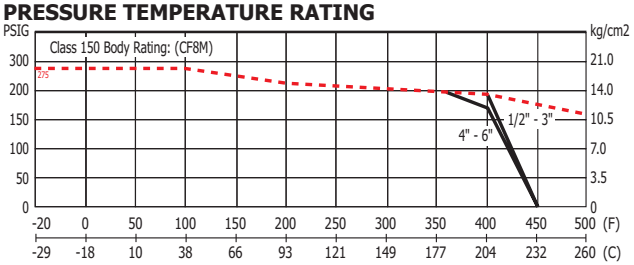


- Reduced port, One piece body
- ANSI B16.34 Class 150
- Blowout-proof stem
- ISO 5211 Mounting pad
- Floating Ball, Anti-static device
- Fire-safe design
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156

NAME / MATERIAL				
NO.	**PART NAME**	**MATERIAL**	**FS***	**QTY**
1	HANDLE	DUCTILE IRON		1
2	STOPPER PLATE	A276 TYPE 304		1
3	LOCK WASHER	A276 TYPE 304		1
4	GLAND NUT	A276 TYPE 304		1
5	STOPPER PIN	A276 TYPE 304		1
6	LOCK WASHER	A276 TYPE 304		1
7	BELLEVILLE WASHER	S.S.301		2
8	GLAND	A276 TYPE 304		1
9	PACKING	PTFE	GRAPHITE	1 SET
10	THRUST WASHER	RPTFE 15% GFT		1
11	STEM	A276 TYPE 316		1
12	ANTI-STATIC DEVICE	A276 TYPE 304		2 SETS
13	BALL	A351 CF8M		1
14	SEAT	PTFE (TFM-1600)		2
15	BODY INSERT	A351 CF8M		1
16	BODY SEAL	PTFE	GRAPHITE	1
17	BODY	A351 CF8M		1
18	IDENTIFICATION PLATE	A276 TYPE 304		1
19	RETAINING RING	CARBON STEEL		1
20	LOCK PLATE	A276 TYPE 304		1

*Fire Safe Certified to API-607

PRESSURE TEMPERATURE RATING



DIMENSIONS																				
SIZE	mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	mm/in **K**	mm/in **L**	in **M**	mm/in **N**	mm/in **P**	mm/in **T**	mm/in **R**	**ISO FLG**	WEIGHT KGS/LBS
2"	38	50	120.5	152	230	1.6	92	19	14	20	125	178	5/16-UNC	4	70	15.9	49	F07	8.00
	1.50	1.97	4.75	5.98	9.06	0.06	3.62	0.75	0.55	0.79	4.92	7.00			2.76	0.63	1.93		17.60
3"	58	76	152.5	190	400	1.6	127	19	17	25	168	203	3/8-UNC	4	70	19.1	59	F07	15.70
	2.28	3.00	6.00	7.48	15.75	0.06	5.00	0.75	0.67	0.98	6.61	8.00			2.76	0.75	2.32		34.54
4"	76	102	190.5	229	400	1.6	157	19	17	25	183	229	3/8-UNC	8	70	23.9	59	F07	24.60
	3.00	4.02	7.50	9.02	15.75	0.06	6.18	0.75	0.67	0.98	7.20	9.02			2.76	0.94	2.32		54.12
6"	114	152	241.5	279	750	1.6	216	22	23	34	245	267	1/2-UNC	8	125	25.4	73	F12	49.50
	4.49	5.98	9.50	10.98	29.53	0.06	8.50	0.88	0.91	1.34	9.65	10.51			4.92	1.00	2.87		108.90

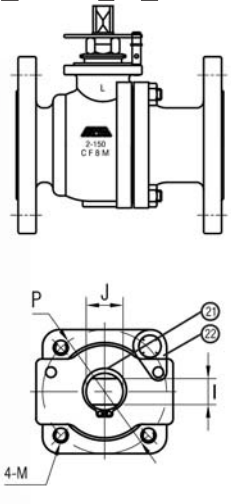
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

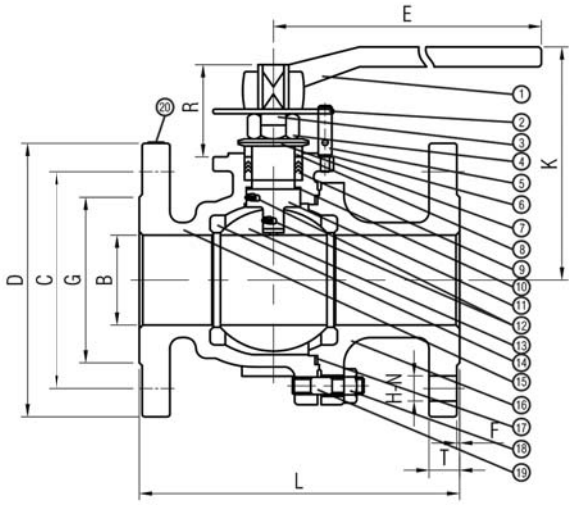
F Series
Flanged Stainless Steel
Ball Valves

F-150-SS-F-N

3.9

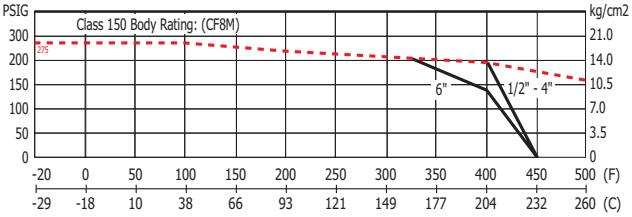






- Full port, Two piece body
- ANSI B16.34 Class 150
- Blowout-proof stem
- ISO 5211 Mounting pad
- Floating Ball, Anti-static device
- Fire-safe design
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156

PRESSURE TEMPERATURE RATING



NAME / MATERIAL				
NO.	**PART NAME**	**MATERIAL**	**FS***	**QTY**
1	HANDLE	DUCTILE IRON		1
2	STOPPER PFATE	A276 TYPE 304		1
3	LOCK WASHER	A276 TYPE 304		1
4	GLAND NUT	A276 TYPE 304		1
5	STOPPER PIN	A276 TYPE 304		1
6	LOCK WASHER	A276 TYPE 304		1
7	BELLEVILLE WASHER	S.S. 301		2
8	GLAND	A276 TYPE 304		1
9	PACKING	PTFE	GRAPHITE	1 SET
10	THRUST WASHER	RPTFE 15% GFT		1
11	STEM	A276 TYPE 316		1
12	ANTI-STATIC DEVICE	A276 TYPE 304		2 SETS
13	BALL	A351 CF8M		1
14	SEAT	PTFE (TFM-1600)		2
15	BODY	A351 CF8M		1
16	CAP	A351 CF8M		1
17	BODY SEAL	PTFE	GRAPHITE	1
18	BOLT NUT	A194 GRADE 8MA		1 SET
19	STUD BOLT	A193 GRADE B8M		1 SET
20	IDENTIFICATION PLATE	A276 TYPE 304		1
21	RETAINING RING	CARBON STEEL		1
22	LOCK PLATE	A276 TYPE 304		1

*Fire Safe Certified to API-607

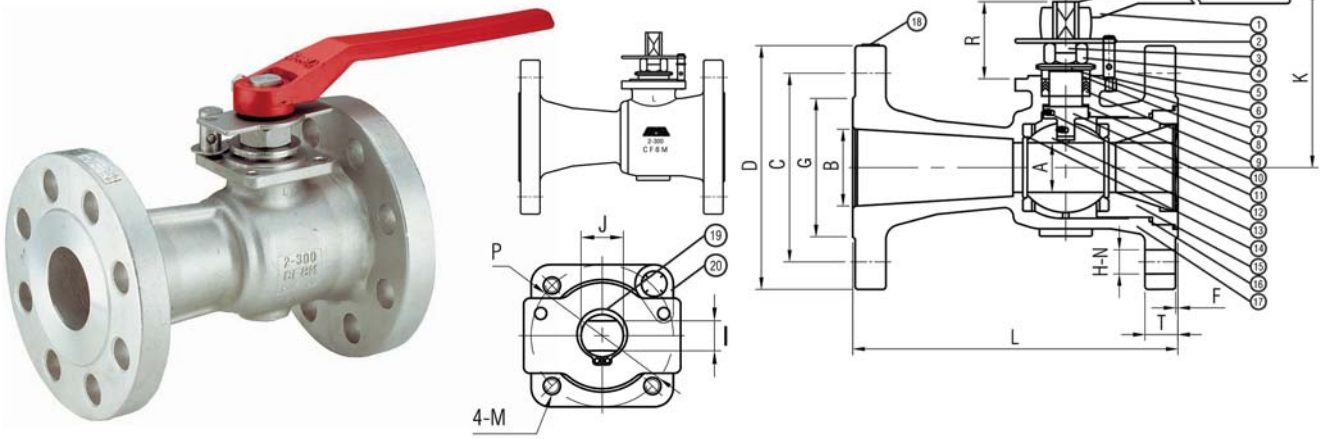
DIMENSIONS																		
SIZE	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	mm/in **K**	mm/in **L**	in **M**	mm/in **N**	mm/in **P**	mm/in **T**	mm/in **R**	**ISO FLG**	WEIGHT KGS/LBS
1/2"	15	60.5	89	130	1.6	35	16	8	11	83	108	1/4-UNC	4	36	11.2	27	F03	1.64
	0.59	2.38	3.50	5.12	0.06	1.38	0.62	0.31	0.43	3.27	4.25			1.42	0.44	1.06		3.60
3/4"	19	70	98.5	130	1.6	43	16	8	11	86	117	1/4 -UNC	4	36	11.2	27	F03	2.00
	0.75	2.75	3.88	5.12	0.06	1.69	0.62	0.31	0.43	3.39	4.62			1.42	0.44	1.06		4.40
1"	24	79	108	160	1.6	51	16	10	14	104	127	1/4 -UNC	4	50	11.2	35.5	F05	3.15
	0.95	3.12	4.25	6.30	0.06	2.00	0.62	0.39	0.55	4.09	5.00			1.97	0.44	1.40		6.93
1 1/2"	38	98.5	127	230	1.6	73	16	14	20	125	165	5/16 -UNC	4	70	14.3	49	F07	6.26
	1.50	3.88	5.00	9.06	0.06	2.88	0.62	0.55	0.79	4.92	6.50			2.76	0.56	19.3		13.77
2"	50	120.5	152	230	1.6	92	19	14	20	134.5	178	5/16 -UNC	4	70	15.9	49	F07	9.30
	1.97	4.75	5.98	9.06	0.06	3.62	0.75	0.55	0.79	5.30	7.00			2.76	0.63	1.93		20.46
2 1/2"	65	139.7	178	400	1.6	104.6	19	17	25	170.5	190.5	3/8 -UNC	4	102	17.5	61	F10	16.82
	2.56	5.50	7.00	15.75	0.06	4.12	0.75	0.67	0.98	6.71	7.50			4.02	0.69	2.40		37.00
3"	76	152.5	190	400	1.6	127	19	17	25	181.5	203	3/8 -UNC	4	102	19.1	61	F10	22.00
	3.00	6.00	7.48	15.75	0.06	5.00	0.75	0.67	0.98	7.15	8.00			4.02	0.75	2.40		48.40
4"	100	190.5	229	460	1.6	157	19	23	34	205.5	229	1/2 -UNC	8	125	23.9	73	F12	37.00
	3.94	7.50	9.02	18.11	0.06	6.18	0.75	0.91	1.34	8.09	9.02			4.92	0.94	2.87		81.40
6"	150	241.5	279	1000	1.6	216	22	27	40	289.5	394	5/8 -UNC	8	140	25.4	90	F14	85.30
	5.91	9.50	10.98	39.37	0.06	8.50	0.88	1.06	1.57	11.40	15.51			5.51	1.00	3.54		187.66

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

F Series
Flanged Stainless Steel
Ball Valves

F-300-SS-R-N

3.10

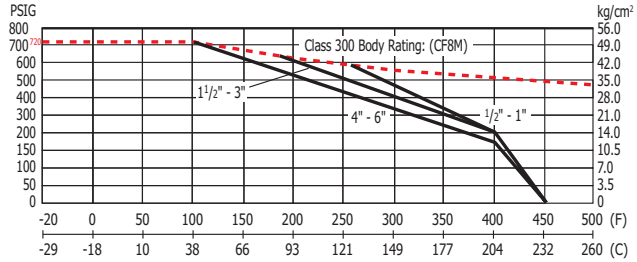


- Reduced port, One piece body
- ANSI B16.34 Class 300
- Blowout-proof stem
- ISO 5211 Mounting pad
- Floating Ball, Anti-static device
- Fire-safe design
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156

NAME / MATERIAL				
NO.	**PART NAME**	**MATERIAL**	**FS***	**QTY**
1	HANDLE	DUCTILE IRON		1
2	STOPPER PLATE	A276 TYPE 304		1
3	LOCK WASHER	A276 TYPE 304		1
4	GLAND NUT	A276 TYPE 304		1
5	STOPPER PIN	A276 TYPE 304		1
6	LOCK WASHER	A276 TYPE 304		1
7	BELLEVILLE WASHER	S.S. 301		2
8	GLAND	A276 TYPE 304		1
9	PACKING	PTFE	GRAPHITE	1 SET
10	THRUST WASHER	RPTFE 15% GFT		1
11	STEM	A276 TYPE 316		1
12	ANTI-STATIC DEVICE	A276 TYPE 304		2 SETS
13	BALL	A351 CF8M		1
14	SEAT	PTFE (TFM-1600)		2
15	BODY INSERT	A351 CF8M		1
16	BODY SEAL	PTFE	GRAPHITE	1
17	BODY	A351 CF8M		1
18	IDENTIFCATION PLATE	A276 TYPE 304		1
19	RETAINING RING	CARBON STEEL		1
20	LOCK PLATE	A276 TYPE 304		1

*Fire Safe Certified to API-607

PRESSURE TEMPERATURE RATING



DIMENSIONS																				
SIZE	mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	mm/in **K**	mm/in **L**	in **M**	mm/in **N**	mm/in **P**	mm/in **T**	mm/in **R**	**ISO FLG**	WEIGHT KGS/LBS
2"	38	50	127	165	230	1.6	92	19	14	20	125	216	5/16-UNC	8	70	22.3	49	F07	11.19
	1.50	1.97	5.00	6.50	9.06	0.06	3.62	0.75	0.55	0.79	4.92	8.50			2.76	0.88	1.93		24.62
3"	58	76	168	210	400	1.6	127	22	17	25	168	283	3/8-UNC	8	70	28.5	59	F07	23.47
	2.28	3.00	6.61	8.27	15.75	0.06	5.00	0.88	0.67	0.98	6.61	11.14			2.76	1.12	2.32		51.63
4"	76	102	200	254	400	1.6	157	22	17	25	183	305	3/8-UNC	8	70	31.8	59	F07	35.72
	3.00	4.02	7.87	10.00	15.75	0.06	6.18	0.88	0.67	0.98	7.20	12.00			2.76	1.25	2.32		78.58
6"	114	152	270	318	750	1.6	216	22	23	34	245	403	1/2-UNC	12	125	36.6	73	F12	79.21
	4.49	5.98	10.63	12.52	29.53	0.06	8.50	0.88	0.91	1.34	9.65	15.87			4.92	1.44	2.87		174.26

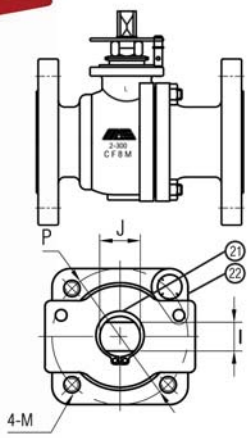
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

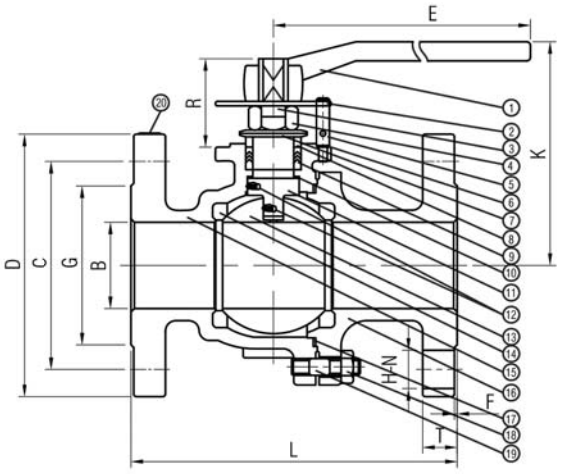
F Series
Flanged Stainless Steel
Ball Valves

F-300-SS-F-N

3.11

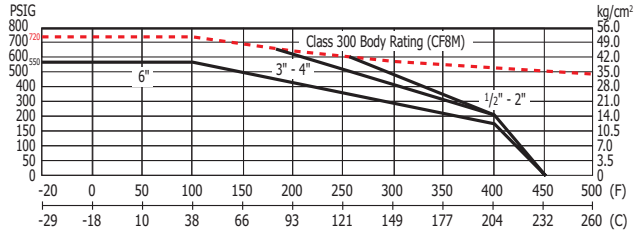






- Full port, Two piece body
- ANSI B16.34 Class 300
- Blowout-proof stem
- ISO 5211 Mounting pad
- Floating Ball, Anti-static device
- Fire-safe design
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156

PRESSURE TEMPERATURE RATING



NAME / MATERIAL				
NO.	**PART NAME**	**MATERIAL**	**FS***	**QTY**
1	HANDLE	DUCTILE IRON		1
2	STOPPER PLATE	A276 TYPE 304		1
3	LOCK WASHER	A276 TYPE 304		1
4	GLAND NUT	A276 TYPE 304		1
5	STOPPER PIN	A276 TYPE 304		1
6	LOCK WASHER	A276 TYPE 304		1
7	BELLEVILLE WASHER	S.S. 301		2
8	GLAND	A276 TYPE 304		1
9	PACKING	PTFE	GRAPHITE	1 SET
10	THRUST WASHER	RPTFE 15% GFT		1
11	STEM	A276 TYPE 316		1
12	ANTI-STATIC DEVICE	A276 TYPE 304		2 SETS
13	BALL	A351 CF8M		1
14	SEAT	PTFE (TFM-1600)		2
15	BODY	A351 CF8M		1
16	CAP	A351 CF8M		1
17	BODY SEAL	PTFE	GRAPHITE	1
18	BOLT NUT	A194 GRADE 8MA		1 SET
19	STUD BOLT	A193 GRADE B8M		1 SET
20	IDENTIFICATION PLATE	A276 TYPE 304		1
21	RETAINING RING	CARBON STEEL		1
22	LOCK PLATE	A276 TYPE 304		1

*Fire Safe Certified to API-607

DIMENSIONS																			
SIZE	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	mm/in **K**	mm/in **L**	in **M**	mm/in **N**	mm/in **P**	mm/in **T**	mm/in **R**	**ISO FLG**	WEIGHT KGS/LBS
1/2"	15	66.5	95	130	1.6	35	16	8	11	83	140	1/4-UNC	4	36	14.2	27	F03	2.20
	0.59	2.62	3.75	5.12	0.06	1.38	0.62	0.31	0.43	3.27	5.50			1.42	0.56	1.06		4.84
3/4"	19	82.5	117	130	1.6	43	19	8	11	86	152.5	1/4-UNC	4	36	15.8	27	F03	3.29
	0.75	3.25	4.62	5.12	0.06	1.69	0.75	0.31	0.43	3.39	6.00			1.42	0.62	1.06		7.23
1"	24	89	124	160	1.6	51	19	10	14	104	165	1/4-UNC	4	50	17.5	35.5	F05	4.76
	0.95	3.50	4.88	6.30	0.06	2.00	0.75	0.39	0.55	4.09	6.50			1.97	0.69	1.40		10.47
1 1/2"	38	114.5	156	230	1.6	73	22	14	20	125	190.5	5/16-UNC	4	70	20.6	49	F07	9.14
	1.50	4.50	6.14	9.06	0.06	2.88	0.88	0.55	0.79	4.92	7.50			2.76	0.81	1.93		20.10
2"	50	127	165	230	1.6	92	19	14	20	134.5	216	5/16-UNC	8	70	22.3	49	F07	12.80
	1.97	5.00	6.50	9.06	0.06	3.62	0.75	0.55	0.79	5.30	8.50			2.76	0.88	1.93		28.16
2 1/2"	65	149.4	190.5	400	1.6	104.6	22	17	25	170.5	241.3	3/8-UNC	8	102	25.4	61	F10	22.73
	2.56	5.88	7.50	15.75	0.06	4.12	0.88	0.67	0.98	6.71	9.50			4.02	1.00	2.40		50.00
3"	76	168	210	400	1.6	127	22	17	25	181.5	283	3/8-UNC	8	102	28.5	61	F10	29.60
	3.00	6.62	8.27	15.75	0.06	5.00	0.88	0.67	0.98	7.15	11.14			4.02	1.12	2.40		65.12
4"	100	200	254	750	1.6	157	22	23	34	205.5	305	1/2-UNC	8	125	31.8	73	F12	50.40
	3.94	7.87	10.00	29.53	0.06	6.18	0.88	0.91	1.34	8.09	12.00			4.92	1.25	2.87		110.88
6"	150	270	318	1000	1.6	216	22	27	40	289.5	403	5/8-UNC	12	140	36.6	90	F14	107.3
	5.91	10.63	12.52	39.37	0.06	8.50	0.88	1.06	1.57	11.40	15.87			5.51	1.44	3.54		236.06

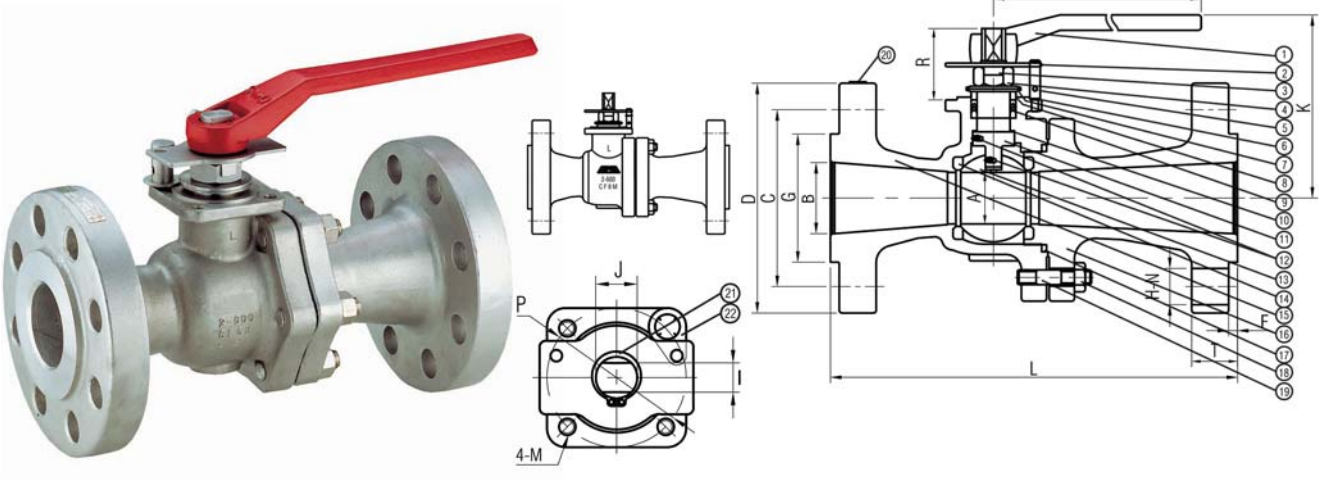
Technical data, dimensions, materials & specifications are subject to change without notice. MAS CA JUNE 18 2018

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

F Series
Flanged Stainless Steel
Ball Valves

F-600-SS-R-N

3.12

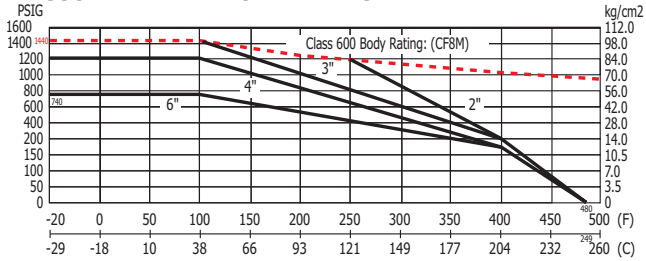


- Reduced port, Two piece body
- ANSI B16.34 Class 600
- ISO 5211 Mounting pad
- Blowout-proof stem
- Anti-static device
- Floating Ball
- Fire-safe design
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156

NAME / MATERIAL				
NO.	**PART NAME**	**MATERIAL**	**FS***	**QTY**
1	HANDLE	DUCTILE IRON		1
2	STOPPER PLATE	A276 TYPE 304		1
3	LOCK WASHER	A276 TYPE 304		1
4	GLAND NUT	A276 TYPE 304		1
5	STOPPER PIN	A276 TYPE 304		1
6	LOCK WASHER	A276 TYPE 304		1
7	BELLEVILLE WASHER	S.S. 301		2
8	GLAND	A276 TYPE 304		1
9	PACKING	PTFE	GRAPHITE	1 SET
10	THRUST WASHER	RPTFE 15% GFT		1
11	STEM	A276 TYPE 316		1
12	ANTI-STATIC DEVICE	A276 TYPE 304		2 SETS
13	BALL	A351 CF8M		1
14	SEAT	PTFE+25% CARBON		2
15	BODY	A351 CF8M		1
16	CAP	A351 CF8M		1
17	BODY SEAL	304+GRAPHITE		1
18	BOLT NUT	A194 GRADE 8MA		1 SET
19	STUD BOLT	A193 GRADE B8M		1 SET
20	IDENTIFICATION PLATE	A276 TYPE 304		1
21	RETAINING RING	CARBON STEEL		1
22	LOCK PLATE	A276 TYPE 304		1

*Fire Safe Certified to API-607

PRESSURE TEMPERATURE RATING



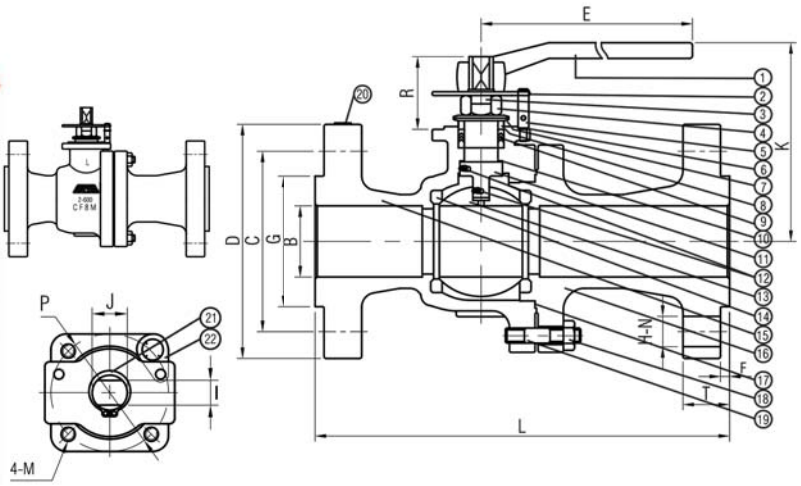
DIMENSIONS																				
SIZE	mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	mm/in **K**	mm/in **L**	in **M**	mm/in **N**	mm/in **P**	mm/in **T**	mm/in **R**	**ISO FLG**	WEIGHT KGS/LBS
2"	38	50	127	165	230	6.35	92	19	14	20	144.5	292	5/16-UNC	8	70	31.8	49	F07	15.72
	1.50	1.97	5.00	6.50	9.06	0.25	3.62	0.75	0.55	0.79	5.69	11.50			2.76	1.25	1.93		34.58
3"	58	76	168	210	400	6.35	127	22.3	17	25	180	356	3/8-UNC	8	70	38.1	59	F07	33.05
	2.28	3.00	6.61	8.27	15.75	0.25	5.00	0.88	0.67	0.98	7.09	14.02			2.76	1.50	2.32		72.71
4"	76	102	216	273	400	6.35	157	25.4	17	25	194	432	3/8-UNC	8	70	44.5	59	F07	61.64
	3.00	4.02	8.50	10.75	15.75	0.25	6.18	1.00	0.67	0.98	7.64	17.00			2.76	1.75	2.32		135.61
6"	114	152	292	356	750	6.35	216	28.5	23	34	256	559	1/2-UNC	12	125	54.1	73	F12	131.83
	4.49	5.98	11.50	14.02	29.53	0.25	8.50	1.12	0.91	1.34	10.08	22.00			4.92	2.13	2.87		290.03

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

F Series
Flanged Stainless Steel Ball Valves

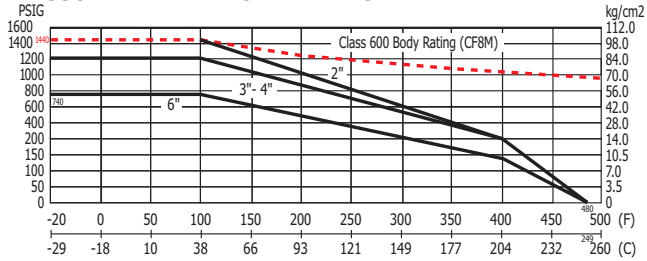
F-600-SS-F-N





- Full port, Two piece body
- ANSI B16.34 Class 600
- ISO 5211 Mounting pad
- Blowout-proof stem
- Anti-static device
- Floating Ball
- Fire-safe design
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156

PRESSURE TEMPERATURE RATING



NAME / MATERIAL				
NO.	**PART NAME**	**MATERIAL**	**FS***	**QTY**
1	HANDLE	DUCTILE IRON		1
2	STOPPER PLATE	A276 TYPE 304		1
3	LOCK WASHER	A276 TYPE 304		1
4	GLAND NUT	A276 TYPE 304		1
5	STOPPER PIN	A276 TYPE 304		1
6	LOCK WASHER	A276 TYPE 304		1
7	BELLEVILLE WASHER	S.S. 301		2
8	GLAND	A276 TYPE 304		1
9	PACKING	PTFE	GRAPHITE	1 SET
10	THRUST WASHER	RPTFE 15% GFT		1
11	STEM	A276 TYPE 316		1
12	ANTI-STATIC DEVICE	A276 TYPE 304		2 SETS
13	BALL	A351 CF8M		1
14	SEAT	PTFE +25% CARBON		2
15	BODY	A351 CF8M		1
16	CAP	A351 CF8M		1
17	BODY SEAL	304+GRAPHITE		1
18	BOLT NUT	A194 GRADE 8MA		1 SET
19	STUD BOLT	A193 GRADE B8M		1 SET
20	IDENTIFICATION PLATE	A276 TYPE 304		1
21	RETAINING RING	CARBON STEEL		1
22	LOCK PLATE	A276 TYPE 304		1

*Fire Safe Certified to API-607

DIMENSIONS																		
SIZE	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	mm/in **K**	mm/in **L**	in **M**	mm/in **N**	mm/in **P**	mm/in **T**	mm/in **R**	**ISO FLG**	WEIGHT KGS/LBS
2"	50	127	165	230	6.35	92	19	14	20	158	292	5/16 -UNC	8	70	31.8	49	F07	17.26
	1.97	5.00	6.50	9.06	0.25	3.62	0.75	0.55	0.79	6.22	11.50			2.76	1.25	1.93		37.97
3"	76	168	210	400	6.35	127	22.3	17	25	194	356	3/8 -UNC	8	102	38.1	61	F10	39.25
	3.00	6.61	8.27	15.75	0.25	5.00	0.88	0.67	0.98	7.64	14.02			4.02	1.50	2.40		86.35
4"	100	216	273	460	6.35	157	25.4	23	34	215.5	432	1/2 -UNC	8	125	44.5	73	F12	71.74
	3.94	8.50	10.75	18.11	0.25	6.18	1.00	0.91	1.34	8.48	17.00			4.92	1.75	2.87		157.83
6"	150	292	356	1000	6.35	216	28.5	27	40	301.5	559	5/8-UNC	12	140	54.1	90	F14	161.62
	5.91	11.50	14.02	39.37	0.25	8.50	1.12	1.06	1.57	11.87	22.00			5.51	2.13	3.54		355.56

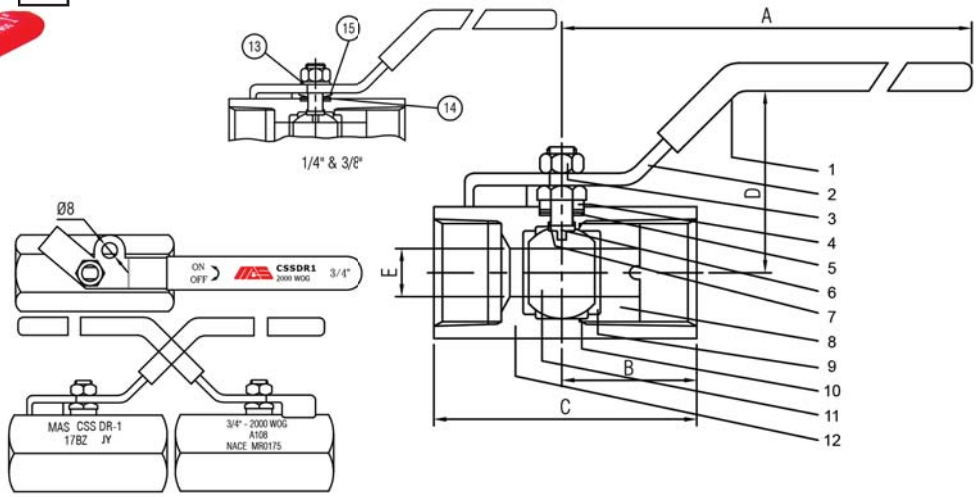
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

C Series
Carbon Steel Bar Stock
Ball Valves

CSSDR-1

4.1



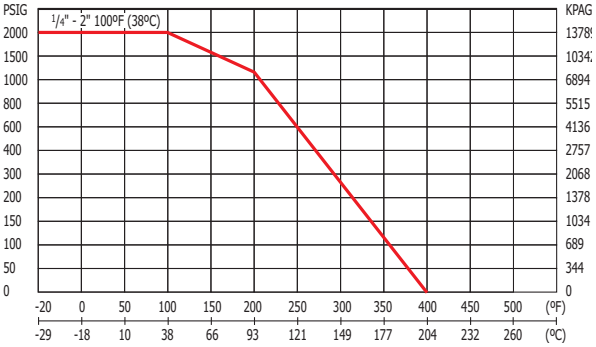


- Reduced port
- NPT ends to ANSI B1.20.1
- One piece body
- Blowout-proof stem
- 2000 p.s.i., W.O.G.
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156

Oval handles optionally available
Lockout hole diameter is 8mm

NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle Grip	Vinyl
2	Handle	C.S. Plated
3	Handle Nut	C.S. Plated
4	Packing Bushing	A276 TYPE 304
5	Packing	PTFE
6	Stem	A276 TYPE 316
7	Thrust Washer	R-PTFE 15% GLASS-FILLED
8	Seat Retainer	C.S. A108 GR 1020
9	Seat	R-PTFE 15% GLASS-FILLED
10	Gasket	PTFE
11	Ball	A351 GRADE CF8M
12	Body	1/4"~1-1/2" C.S. A108 GR 1020 2" C.S. A105N
13	Stem Washer	A276 TYPE 304
14	Spring Washer	A276 TYPE 304
15	Belleville Washer	S.S. 301

PRESSURE TEMPERATURE RATING



DIMENSIONS								
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	**CV**	WEIGHT KGS/LBS
8	**1/4"**	71.00	23.90	43.10	30.0	4.60	1.5	0.100
		2.80	0.94	1.70	1.80	0.18		0.220
10	**3/8"**	85.50	26.05	47.35	33.35	6.80	3.5	0.153
		3.37	1.03	1.86	1.31	0.27		0.337
15	**1/2"**	109.47	32.95	61.72	54.41	9.20	5.7	0.315
		4.31	1.30	2.43	2.14	0.36		0.693
20	**3/4"**	112.5	37.25	69.85	55.00	12.50	10	0.460
		4.43	1.47	2.75	2.17	0.49		1.012
25	**1"**	112.5	44.50	85.73	61.50	16.00	16	0.690
		4.43	1.75	3.38	2.42	0.63		1.518
32	**1 1/4"**	147.5	48.60	93.67	73.50	20.00	25	1.439
		5.81	1.91	3.69	2.89	0.79		3.166
40	**1 1/2"**	147.5	52.55	101.6	75.00	24.70	40	1.455
		5.81	2.07	4.00	2.95	0.97		3.201
50	**2"**	154.0	57.70	114.3	85.50	32.00	62	2.700
		6.06	2.27	4.50	3.37	1.26		5.940

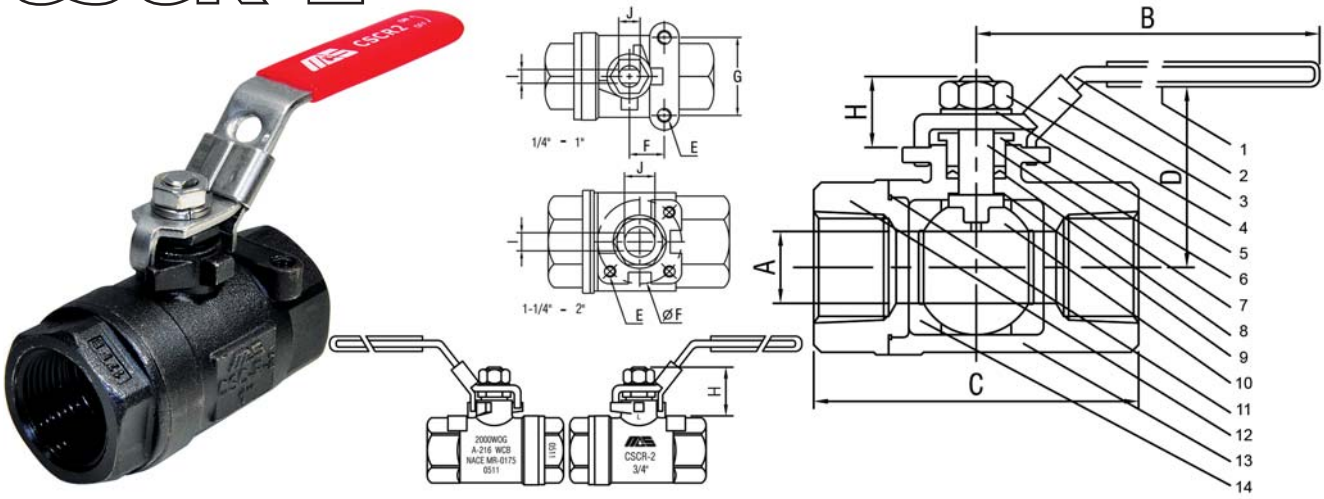
Technical data, dimensions, materials & specifications are subject to change without notice. MAS CA JUNE 28 2018

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

C Series
Carbon Steel Ball Valves

CSCR-2

4.2



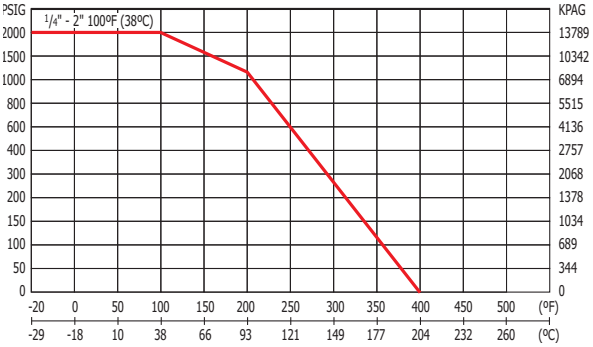
- Large port
- Locking lever handle
- NPT ends to ANSI B1.20.1
- Two piece body
- Blowout-proof stem
- Adjustable packing gland
- Actuator mounting pad
- 2000 p.s.i., W.O.G.
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156

- **Optional; Model LSSR-2 (LCC body/cap) for -50°F/-46°C service is available**

All mounting pads are not tapped, but have reserve holes cast in (except 3/4" and 1" which are dimpled). Recommended tapping sizes are listed for reference only.

NAME / MATERIAL			
NO.	**PART NAME**	**MATERIAL CSCR-2**	**LSSR-2**
1	Handle Grip	Vinyl	
2	Handle	A276 TYPE 304	
3	Locking Device	A276 TYPE 304	
4	Handle Nut	A276 TYPE 304	
5	Stem Washer	A276 TYPE 304	
6	Gland Nut	C.S.A108	
7	Stem	A276 TYPE 316	
8	Packing	PTFE	
9	Thrust Washer	R-PTFE 15% GLASS-FILLED	
10	Ball	A351 GRADE CF8M	
11	Gasket	PTFE	
12	Cap	A216 GRADE WCB	*(A352 LCC)
13	Body	A216 GRADE WCB	*(A352 LCC)
14	Seat	R-PTFE 15% GLASS-FILLED	

PRESSURE TEMPERATURE RATING



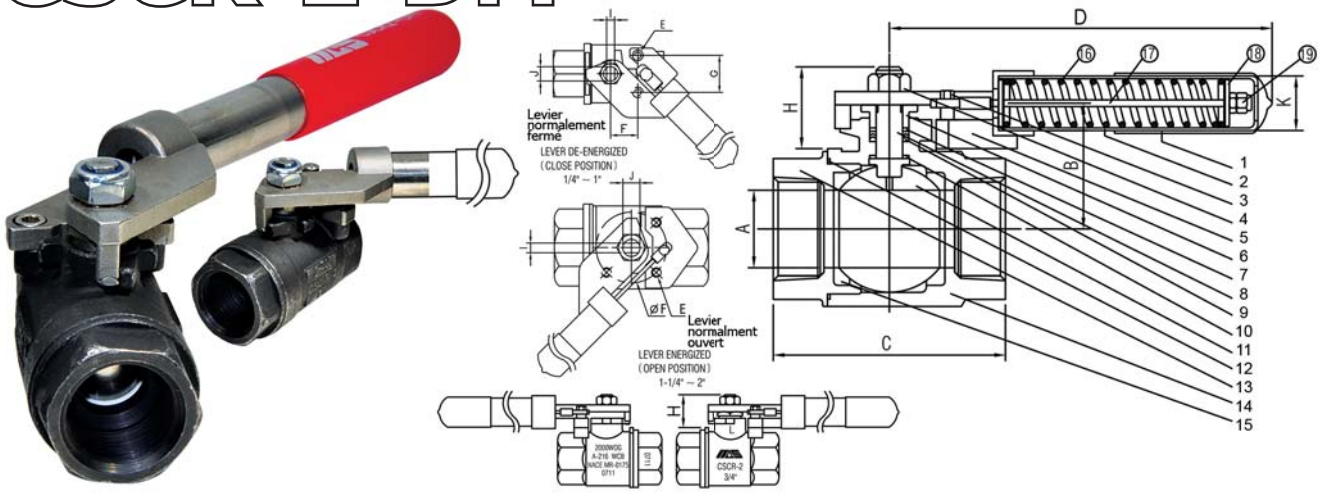
DIMENSIONS														
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	**E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	**CV**	WEIGHT KGS/LBS
8	**1/4"**	11	103.5	58.5	54	M6	12.7	28.45	24.50	5.50	7.70	8	0.347
		0.433	4.075	2.303	2.13		0.5	1.12	0.965	0.217	0.303		0.763
10	**3/8"**	12.5	103.5	58.5	54	M6	12.7	28.45	24.50	5.50	7.70	10	0.331
		0.492	4.075	2.303	2.13		0.5	1.12	0.965	0.217	0.303		0.728
15	**1/2"**	12.5	103.5	61.5	57	M6	12.7	28.45	22.50	5.50	7.70	15	0.314
		0.492	4.075	2.421	2.24		0.5	1.12	0.886	0.217	0.303		0.691
20	**3/4"**	17.5	125	79.5	65.5	M6	22.1	34.8	27.50	6.50	9.30	30	0.602
		0.689	4.921	3.130	2.58		0.87	1.37	1.083	0.256	0.367		1.324
25	**1"**	20.6	125	88.5	69.5	M6	22.1	34.8	27.50	6.50	9.30	40	0.781
		0.866	4.921	3.484	2.74		0.87	1.37	1.083	0.256	0.367		1.718
32	**1 1/4"**	25	193	102	88.5	M8	50		24.50	8.00	12.50	48	1.477
		0.964	7.598	4.016	3.484		1.968		0.965	0.315	0.492		3.249
40	**1 1/2"**	31.8	193	111	94.5	M8	50		24.50	8.00	12.50	80	1.987
		1.252	7.598	4.370	3.720		1.968		0.965	0.315	0.492		4.371
50	**2"**	38	193	137	107	M8	50		26.00	10.00	15.60	108	2.633
		1.496	7.598	5.394	4.213		1.968		1.024	0.394	0.614		5.793

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

C Series
Carbon Steel, Deadman Spring Handle Ball Valves

CSCR-2-DM

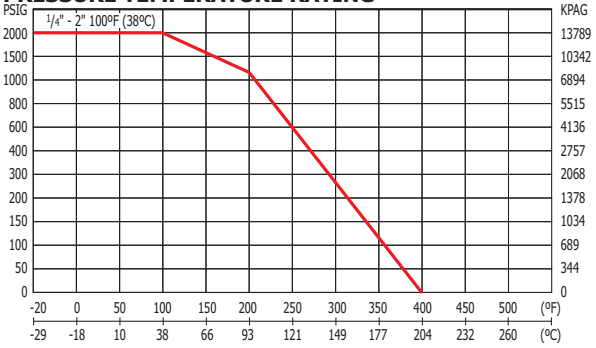
4.3



- Large port
- NPT ends to ANSI B1.20.1
- Two piece body
- Blowout-proof stem
- Adjustable packing gland
- Deadman handle
- Actuator mounting pad
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156 2000 P.S.I. W.O.G.

NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle Grip	Vinyl
2	Handle Housing	A269 GR.TP304
3	Anchor Screw	A276 TYPE 304
4	Handle Nut	C.S. Plated
5	Anchor	A351 GRADE CF8M
6	Gland Nut	A276 TYPE 304
7	Packing Washer	PEEK
8	Stem	A276 TYPE 316
9	Packing	RPTFE 50% S/S FILLED
10	Thrust Washer	PEEK
11	Ball	A351 GRADE CF8M
12	Gasket	PTFE
13	Cap	A216 GRADE WCB
14	Body	A216 GRADE WCB
15	Seat	R-PTFE 15% GLASS-FILLED
16	Spring	A29 GRADE 9260
17	Rod	A276 TYPE 304
18	Washer	A276 TYPE 304
19	Nuts	A194 GRADE 8

PRESSURE TEMPERATURE RATING



DIMENSIONS															
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	**E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	mm/in **K**	**CV**	WEIGHT KGS/LBS
8	**1/4"**	11	29.3	58.5	180.5	M6	12.7	28.45	28.50	5.50	7.70	22.0	8	0.690
		0.433	1.154	2.303	7.106		0.5	1.12	1.122	0.217	0.303	0.866		1.521
10	**3/8"**	12.7	29.3	58.5	180.5	M6	12.7	28.45	28.50	5.50	7.70	22.0	10	0.672
		0.500	1.154	2.303	7.106		0.5	1.12	1.122	0.217	0.303	0.866		1.481
15	**1/2"**	12.7	29.3	61.5	180.5	M6	12.7	28.45	26.50	5.50	7.70	22.0	15	0.671
		0.500	1.154	2.421	7.106		0.5	1.12	1.043	0.217	0.303	0.866		1.479
20	**3/4"**	17.5	35.9	79.5	232.5	M6	22.5	35.35	32.00	6.50	9.30	22.0	30	0.920
		0.689	1.415	3.130	9.154		0.886	1.392	1.260	0.256	0.367	0.866		2.028
25	**1"**	20.6	38.4	87.5	232.5	M6	22.0	35.35	32.00	6.50	9.30	22.0	40	1.094
		0.866	1.514	3.443	9.154		0.886	1.392	1.260	0.256	0.367	0.866		2.411
32	**1 1/4"**	25.4	48.6	102	287	M8	50	35.35	29.50	8.00	12.50	22.0	48	1.705
		1.00	1.913	4.016	11.29		1.968	1.392	1.161	0.315	0.492	0.866		3.759
40	**1 1/2"**	31.8	51.4	111	290	M8	50	35.35	29.50	8.00	12.50	22.0	80	2.354
		1.252	2.023	4.370	11.417		1.968	1.392	1.161	0.315	0.492	0.866		5.190
50	**2"**	38.1	59.5	136	313	M8	50	35.35	31.00	10.00	15.60	32.0	108	2.974
		1.500	2.341	5.354	12.32		1.968	1.392	1.260	0.394	0.614	1.260		6.556

Technical data, dimensions, materials & specifications are subject to change without notice. MAS CA JUNE 28 2018

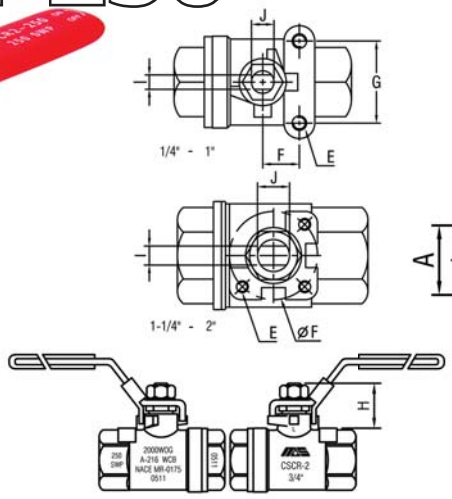
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

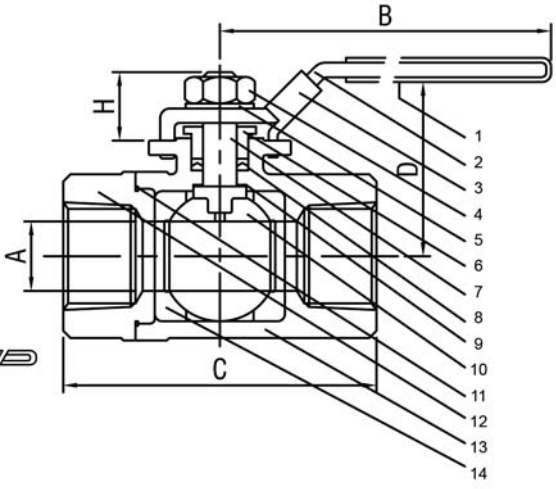
C Series
Carbon Steel, 250 Steam Rated Ball Valves

CSCR-2-250

4.4





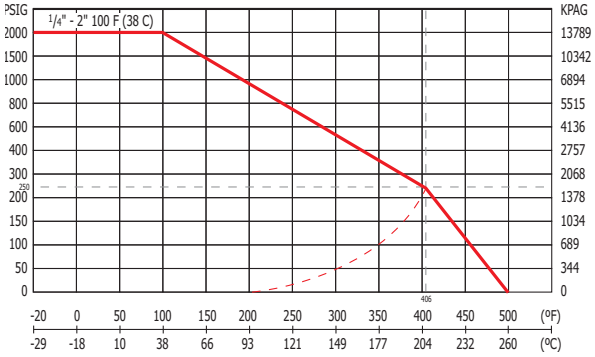


- Large port
- NPT threads to ANSI B1.20.1
- Two piece body
- 250 PSIG Steam Trim
- Blowout-proof stem
- Adjustable packing gland
- Locking lever handle
- Actuator mounting pad
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156 2000 p.s.i., W.O.G.

All mounting pads are not tapped, but have reserve holes cast in (except 3/4" and 1" which are dimpled). Recommended tapping sizes are listed for reference only.

NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle Grip	Vinyl
2	Handle	A276 TYPE 304
3	Locking Device	A276 TYPE 304
4	Handle Nut	A276 TYPE 304
5	Stem Washer	A276 TYPE 304
6	Gland Nut	C.S.A108
7	Stem	A276 TYPE 316
8	Packing	R-PTFE (TFM-4215)
9	Thrust Washer	R-PTFE (TFM-4215)
10	Ball	A351 GRADE CF8M
11	Gasket	R-PTFE (TFM-4215)
12	Cap	A216 GRADE WCB
13	Body	A216 GRADE WCB
14	Seat	R-PTFE (TFM-4215)

PRESSURE TEMPERATURE RATING

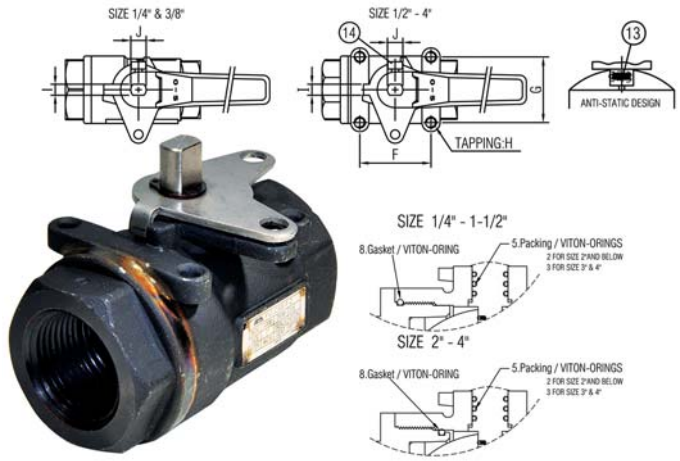


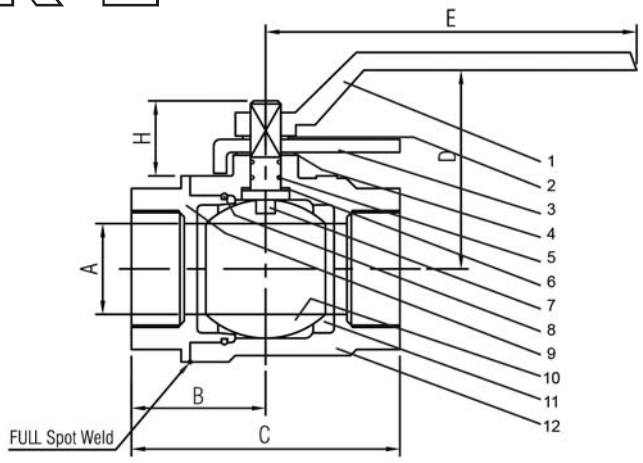
DIMENSIONS															
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	**E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	**CV**	WEIGHT KGS/LBS
8	**1/4"**	11	103.5	58.5	54	M6	12.7	28.45	24.50	5.50	7.70	8	0.347
		0.433	4.075	2.303	2.13		0.5	1.12	0.965	0.217	0.303		0.763
10	**3/8"**	12.5	103.5	58.5	54	M6	12.7	28.45	24.50	5.50	7.70	10	0.331
		0.492	4.075	2.303	2.13		0.5	1.12	0.965	0.217	0.303		0.728
15	**1/2"**	12.5	103.5	61.5	57	M6	12.7	28.45	22.50	5.50	7.70	15	0.314
		0.492	4.075	2.421	2.24		0.5	1.12	0.886	0.217	0.303		0.691
20	**3/4"**	17.5	125	79.5	65.5	M6	22.1	34.8	27.50	6.50	9.30	30	0.602
		0.689	4.921	3.130	2.58		0.87	1.37	1.083	0.256	0.367		1.324
25	**1"**	20.6	125	88.5	69.5	M6	22.1	34.8	27.50	6.50	9.30	40	0.781
		0.866	4.921	3.484	2.74		0.87	1.37	1.083	0.256	0.367		1.718
32	**1 1/4"**	25	193	102	88.5	M8	50		24.50	8.00	12.50	48	1.477
		0.964	7.598	4.016	3.484		1.968		0.965	0.315	0.492		3.249
40	**1 1/2"**	31.8	193	111	94.5	M8	50		24.50	8.00	12.50	80	1.987
		1.252	7.589	4.370	3.720		1.968		0.965	0.315	0.492		4.371
50	**2"**	38	193	137	107	M8	50		26.00	10.00	15.60	108	2.633
		1.496	7.589	5.394	4.213		1.968		1.024	0.394	0.614		5.793

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

C Series
Carbon Steel Ball Valves

CSS-F-2/CSS-R-2 4.5





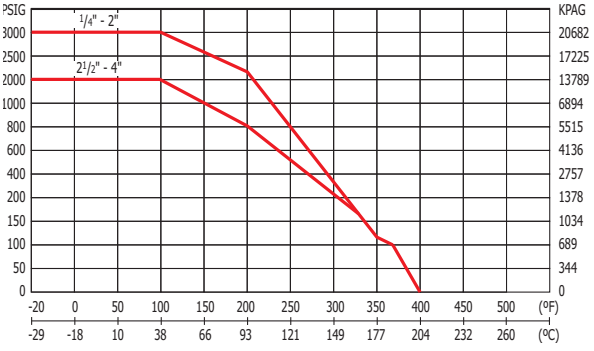
- Full port
- NPT to ANSI B1.20.1
- Full sealwelded 2 piece body
- Blowout-proof stem
- Anti-static device
- Locking device
- Actuator mounting pad
- 3000 PSI, W.O.G. 1/4" to 2"
- 2000 PSI, W.O.G. 2 1/2" to 4"
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156

- Optional 2" CSS-R-2 large port

Mounting pads on 2" are tapped. All others have reserve holes. Recommended tapping sizes listed in (H) are for reference only (1/4" & 3/8" are not provided with mounting pads).

NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle	A536 Grade 65-45-12 Ductile-Iron
2	Retainer Spring	Carbon Steel
3	Lockable Stop Plate	C.S. Plated
4	Stem Bearing	NYLON
5	Packing	VITON-ORINGS(2)
6	Thrust Washer	R-PTFE 15% GLASS-FILLED
7	Stem	A276 TYPE 316
8	Gasket	VITON-ORING (1)
9	Cap	A216 GRADE WCB
10	Ball	A351 GRADE CF8M
11	Seat	R-PTFE 15% GLASS-FILLED
12	Body	A216 GRADE WCB
13	Spring & pin	A276 TYPE 304
14	Screw	A307 Carbon Steel

PRESSURE TEMPERATURE RATING



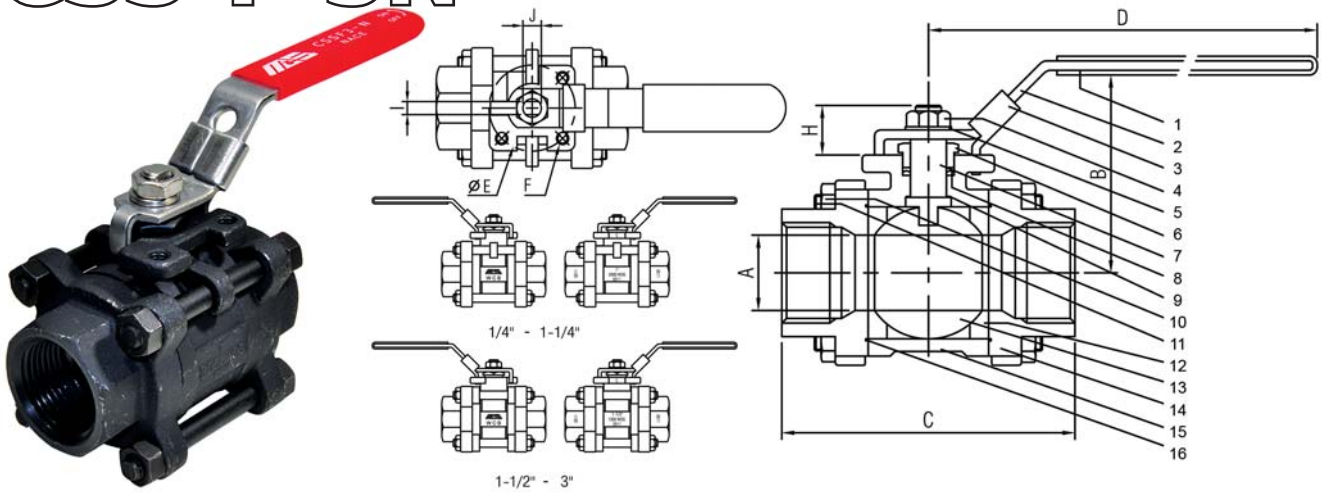
DIMENSIONS															
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	mm/in **F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	note1 **H**	**CV**	WEIGHT KGS/LBS
8	**1/4"**	9.50	30.30	62.00	51.50	130				5.90	9.70		11	0.354
		0.374	1.193	2.441	2.028	5.12				0.232	0.382			0.779
10	**3/8"**	9.50	30.30	62.00	51.50	130				5.90	9.70		11	0.346
		0.374	1.193	2.441	2.028	5.12				0.232	0.382			0.761
15	**1/2"**	12.70	35.00	69.00	54.50	130	25.40	35.00	19.00	5.90	9.70	M6	15	0.530
		0.500	1.378	2.717	2.146	5.12	1.000	1.378	0.748	0.232	0.382			1.166
20	**3/4"**	20.00	45.00	85.00	64.30	160	44.20	41.00	25.00	8.00	11.70	M6	45	0.940
		0.787	1.772	3.346	2.531	6.30	1.740	1.614	0.984	0.315	0.461			2.068
25	**1"**	25.00	44.51	86.00	67.40	160	44.20	44.00	25.50	8.00	11.70	M6	65	1.350
		0.984	1.752	3.385	2.654	6.30	1.740	1.732	1.004	0.315	0.461			2.970
32	**1 1/4"**	31.80	50.35	97.85	75.00	230	47.20	54.00	37.6	12.00	16.90	M8	125	2.390
		1.252	1.982	3.852	2.953	9.06	1.858	2.126	1.480	0.472	0.665			5.258
40	**1 1/2"**	38.10	55.00	109.0	81.00	230	47.20	60.00	36.25	12.00	16.90	M8	175	2.980
		1.500	2.165	4.291	3.189	9.06	1.858	2.362	1.427	0.472	0.665			6.556
50	**2"**	50	64.50	128.0	93.40	231.0	47.50	74.00	34.40	12.00	16.90	M8	380	4.380
		1.968	2.539	5.039	3.677	9.094	1.870	2.913	1.354	0.472	0.665			9.656
65	**2 1/2"**	65.00	81.90	164.0	114.8	400	70.00	81.00	38.50	14.00	20.90	M8	500	8.960
		2.559	3.224	6.457	4.520	15.75	2.750	3.189	1.516	0.551	0.823			19.712
80	**3"**	76.00	88.5	175.5	124.8	400	70.00	92.00	42.75	14.00	20.90	M8	900	10.950
		2.992	3.484	6.909	4.913	15.75	2.750	3.622	1.683	0.551	0.823			24.141
100	**4"**	100.0	106.0	211.0	140.7	460	88.40	125.0	57.00	17.00	28.90	M8	1250	19.800
		3.937	4.173	8.307	5.539	18.11	3.480	4.921	2.244	0.669	1.138			43.652

Technical data, dimensions, materials & specifications are subject to change without notice. MAS CA JUNE 28 2018

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

C Series
Carbon Steel 3 Piece
Ball Valves

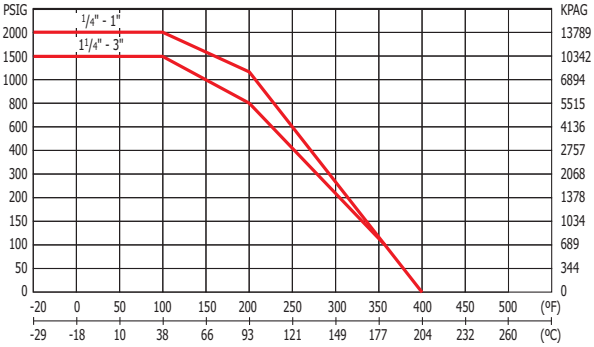
CSS-F-3N



- Full port
- NPT threads to ANSI B1.20.1
- Three piece body
- Blowout-proof stem
- Adjustable packing nut
- Locking lever handle
- ISO 5211 mounting pad
- Floating ball
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156
- 2000 PSI, W.O.G. 1/4" to 1"
- 1500 PSI, W.O.G. 1 1/4" to 3"

NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle Grip	Vinyl
2	Handle	A276 TYPE 304
3	Locking Device	A276 TYPE 304
4	Handle Nut	A276 TYPE 304
5	Stem Washer	A276 TYPE 304
6	Gland Nut	C.S.A108
7	Stem	A276 TYPE 316
8	Packing	PTFE
9	Thrust Washer	R-PTFE 15% GLASS-FILLED
10	Hex Nut	A194 GRADE 2HM
11	Stud Bolt	A193 GRADE B7M
12	Seat	R-PTFE 15% GLASS-FILLED
13	Ball	A351 GRADE CF8M
14	Cap	A216 GRADE WCB
15	Body	A216 GRADE WCB
16	Gasket	PTFE

PRESSURE TEMPERATURE RATING



DIMENSIONS													
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	**F**	mm/in **H**	mm/in **I**	mm/in **J**	**CV**	WEIGHT KGS/LBS
8	**1/4"**	9.5	67	60	120	36	M6	11.50	5.50	7.70	10	0.434
		0.374	2.638	2.362	4.724	1.417		0.453	0.217	0.303		0.955
10	**3/8"**	9.5	67	60	120	36	M6	12.50	5.50	7.70	10	0.420
		0.374	2.638	2.362	4.724	1.417		0.492	0.217	0.303		0.924
15	**1/2"**	15	68.5	70	120	36	M6	14.50	5.50	7.70	26	0.620
		0.591	2.697	2.756	4.724	1.417		0.571	0.217	0.303		1.364
20	**3/4"**	20	75	76	139	42	M6	18.00	6.50	9.30	50	0.910
		0.787	2.953	2.992	5.472	1.653		0.709	0.256	0.367		2.002
25	**1"**	25	79	92	139	42	M6	18.00	6.50	9.30	68	1.190
		0.984	3.110	3.622	5.472	1.653		0.709	0.256	0.367		2.618
32	**1 1/4"**	32	88.5	105	193	50	M8	23.50	8.00	12.50	120	1.930
		1.260	3.484	4.134	7.598	1.968		0.925	0.315	0.492		4.246
40	**1 1/2"**	38	94.5	120	193	70	M8	22.50	8.00	12.50	170	2.780
		1.496	3.720	4.724	7.598	2.756		0.886	0.315	0.492		6.116
50	**2"**	50.5	107	138	193	70	M8	25.00	10.00	15.60	360	4.750
		1.988	4.213	5.433	7.598	2.756		0.984	0.394	0.614		10.450
65	**2 1/2"**	65	129.5	170.5	244	102	M8	32.50	12.00	18.80	510	8.630
		2.559	5.098	6.713	9.606	4.016		1.280	0.472	0.740		18.986
80	**3"**	78	139.5	191	244	102	M8	31.00	12.00	18.80	900	13.460
		3.071	5.492	7.520	9.606	4.016		1.220	0.472	0.740		29.612

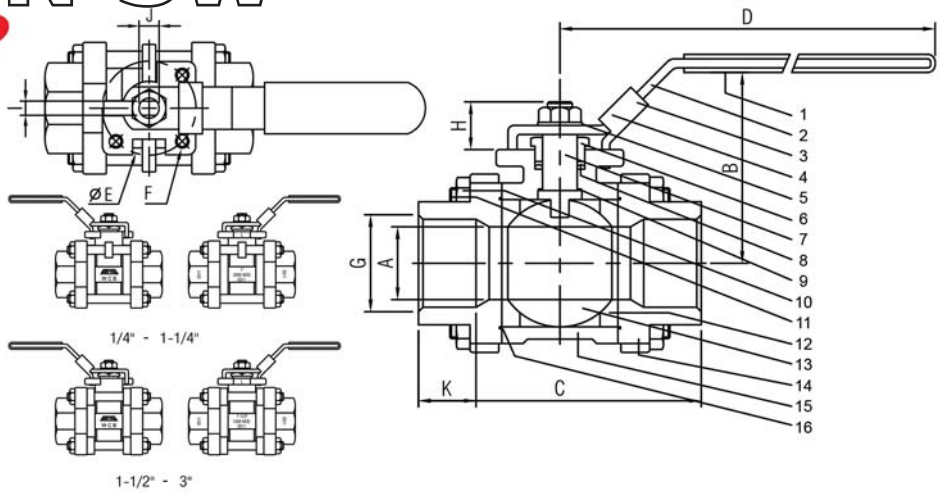
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

C Series
Carbon Steel 3 Piece
Ball Valves

CSS-F-3N-SW

4.7



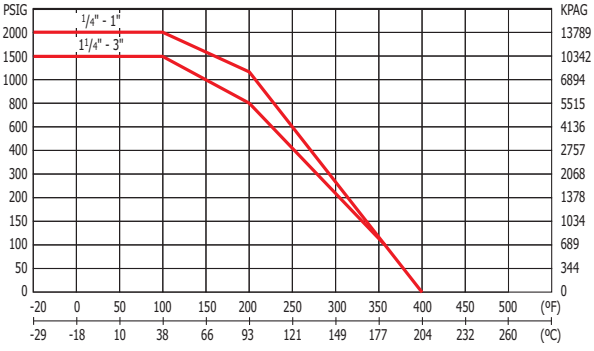


- Full port
- Socket Weld ends to ANSI B16.11
- Three Piece body
- Blowout-proof stem
- Adjustable packing nut
- Locking lever handle
- ISO 5211 mounting pad
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156
- Floating ball
- 2000 PSI, W.O.G. 1/4" to 1"
- 1500 PSI, W.O.G. 1 z1/4" to 3"

CSS-F-3N-BW (butt-weld) available on request

NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle Grip	Vinyl
2	Handle	A276 TYPE 304
3	Locking Device	A276 TYPE 304
4	Handle Nut	A276 TYPE 304
5	Stem Washer	A276 TYPE 304
6	Gland Nut	C.S.A108
7	Stem	A276 TYPE 316
8	Packing	PTFE
9	Thrust Washer	R-PTFE 15% GLASS-FILLED
10	Hex Nut	A194 GRADE 2HM
11	Stud Bolt	A193 GRADE B7M
12	Seat	R-PTFE 15% GLASS-FILLED
13	Ball	A351 GRADE CF8M
14	Cap	A216 GRADE WCB
15	Body	A216 GRADE WCB
16	Gasket	PTFE

PRESSURE TEMPERATURE RATING



DIMENSIONS																
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	**F**	mm/in **G**	mm/in **H**	mm/in **I**	mm/in **J**	mm/in **K**	**CV**	WEIGHT KGS/LBS
8	**1/4"**	9.5	67	60	120	36	M6	14.2	11.50	5.50	7.70	12	10	0.415
		0.374	2.638	2.362	4.724	1.417		0.559	0.453	0.217	0.303	0.472		0.913
10	**3/8"**	9.5	67	60	120	36	M6	17.6	12.50	5.50	7.70	12	10	0.400
		0.374	2.638	2.362	4.724	1.417		0.693	0.492	0.217	0.303	0.472		0.880
15	**1/2"**	15	68.5	70	120	36	M6	21.7	14.50	5.50	7.70	17	26	0.600
		0.591	2.697	2.756	4.724	1.417		0.854	0.571	0.217	0.303	0.669		1.320
20	**3/4"**	20	75	76	139	42	M6	27.1	18.00	6.50	9.30	17	50	0.880
		0.787	2.953	2.992	5.472	1.653		1.067	0.709	0.256	0.367	0.669		1.936
25	**1"**	25	79	92	139	42	M6	33.8	18.00	6.50	9.30	19	68	1.150
		0.984	3.110	3.622	5.472	1.653		1.330	0.709	0.256	0.367	0.748		2.530
32	**1 1/4"**	32	88.5	105	193	50	M8	42.6	23.50	8.00	12.50	21	120	1.870
		1.260	3.484	4.134	7.598	1.968		1.677	0.925	0.315	0.492	0.827		4.114
40	**1 1/2"**	38	94.5	120	193	70	M8	48.7	22.50	8.00	12.50	23	170	2.670
		1.496	3.720	4.724	7.598	2.756		1.917	0.886	0.315	0.492	0.906		5.874
50	**2"**	50.5	107	138	193	70	M8	61.0	25.00	10.00	15.60	24	360	4.620
		1.988	4.213	5.433	7.598	2.756		2.402	0.984	0.394	0.614	0.945		10.164
65	**2 1/2"**	65	129.5	170.5	244	102	M8	73.8	32.50	12.00	18.80	31	510	8.250
		2.559	5.098	6.713	9.606	4.016		2.906	1.280	0.472	0.740	1.22		18.150
80	**3"**	78	139.5	191	244	102	M8	90.0	31.00	12.00	18.80	32	900	13.000
		3.071	5.492	7.520	9.606	4.016		3.543	1.220	0.472	0.740	1.26		28.600

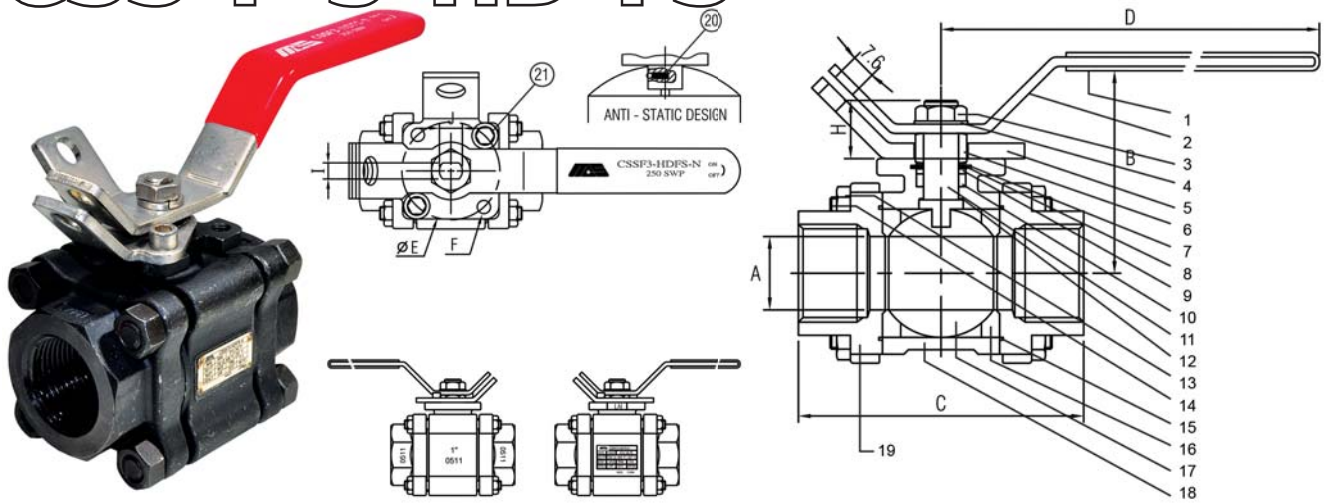
Technical data, dimensions, materials & specifications are subject to change without notice. MAS CA JUNE 28 2018

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

C Series
Carbon Steel 3 Piece
API 607 Ball Valves

CSS-F-3-HD-FS

4.8

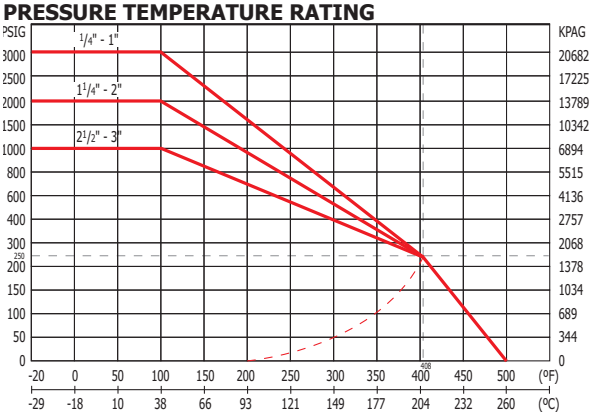


- Three piece body / Full port
- NPT threads to ANSI B1.20.1
- Anti-static design
- Blowout proof stem
- Adjustable live loading packing nut
- Positive lock-out device
- ISO 5211 mounting pad
- Complies with NACE MR-0103 & Supplier Requirements of NACE MR-0175/ISO 15156
- Fire-safe certified to API-607 5th edition
- 250 PSIG steam rated
- 3000 P.S.I. W.O.G. (1500 class) 1/4" to 1"
- 2000 P.S.I. W.O.G. (900 class) 1-1/4" to 2"
- 1000 P.S.I. W.O.G. (600 class) 2-1/2" to 3"

Socketweld ends available
Valves comply to B16.34 Class 600, 900 & 1500 wall thickness.

NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle Grip	Vinyl
2	Handle	A276 TYPE 304
3	Handle Nut	A276 TYPE 304
4	Handle Washer	A276 TYPE 304
5	Lock-Out Plate	A276 TYPE 304
6	Gland Nut	A276 TYPE 304
7	Lock Washer	A276 TYPE 304
8	Belleville Washer	S.S.301
9	Gland	A276 TYPE 304
10	Packing	GRAPHITE
11	Stem	A276 TYPE 316
12	Thrust Washer	R-PTFE (TFM4215)
13	Hex Nut	A194 GRADE 2HM
14	Stud Bolt	A193 GRADE B7M
15	Gasket	S.S. 304 + GRAPHITE
16	Seat	R-PTFE (TFM4215)
17	Ball	A351 GRADE CF8M
18	Body	A216 GRADE WCB
19	Cap	A216 GRADE WCB
20	Spring & pin	A276 TYPE 304
21	Stopper	A276 TYPE 304

PRESSURE TEMPERATURE RATING



DIMENSIONS													
SIZE		mm/in **A**	mm/in **B**	mm/in **C**	mm/in **D**	mm/in **E**	mm/in **H**	mm/in **I**	mm/in **J**	**F**	ISO FLG TYPE	**CV**	WEIGHT KGS/LBS
8	**1/4"**	10	65.8	64.5	120	36	15.5	5.5	8.1	M6	F03	11	0.68
		0.37	2.59	2.54	4.72	1.417	0.61	0.22	0.32				1.499
10	**3/8"**	10	65.8	64.5	120	36	15.5	5.5	8.1	M6	F03	11	0.68
		0.37	2.59	2.54	4.72	1.417	0.61	0.22	0.32				1.499
15	**1/2"**	15	68.5	68.5	120	36	15.5	5.5	8.1	M6	F03	26	0.82
		0.50	2.70	2.70	4.72	1.417	0.61	0.22	0.32				1.808
20	**3/4"**	20	75	80.5	139	42	18.5	6.5	9.6	M6	F04	50	1.35
		0.75	2.95	3.17	5.47	1.654	0.73	0.26	0.38				2.976
25	**1"**	25	79	91.5	139	42	18.5	6.5	9.6	M6	F04	68	1.82
		1.00	3.11	3.60	5.47	1.654	0.73	0.26	0.38				4.012
32	**1 1/4"**	32	88.5	100.5	193	50	23.5	8	12.8	M8	F05	120	2.81
		1.25	3.48	3.96	7.60	1.969	0.93	0.32	0.50				6.195
40	**1 1/2"**	38	94.5	117	193	70	23.5	8	12.8	M8	F07	170	4.64
		1.50	3.72	4.61	7.60	2.756	0.93	0.32	0.50				10.229
50	**2"**	50	107	133.5	193	70	27	10	16.1	M8	F07	360	7.64
		2.00	4.21	5.26	7.60	2.756	1.06	0.39	0.63				16.843
65	**2 1/2"**	65	129.5	157.8	244	102	30	12	19.25	M8	F10	510	10.77
		2.50	5.10	6.21	9.61	4.016	1.18	0.47	0.76				23.744
80	**3"**	78	139.5	178	244	102	30	12	19.25	M8	F10	900	15.70
		3.00	5.49	7.01	9.61	4.016	1.18	0.47	0.76				34.612

Technical data, dimensions, materials & specifications are subject to change without notice. MAS CA JUNE 28 2018

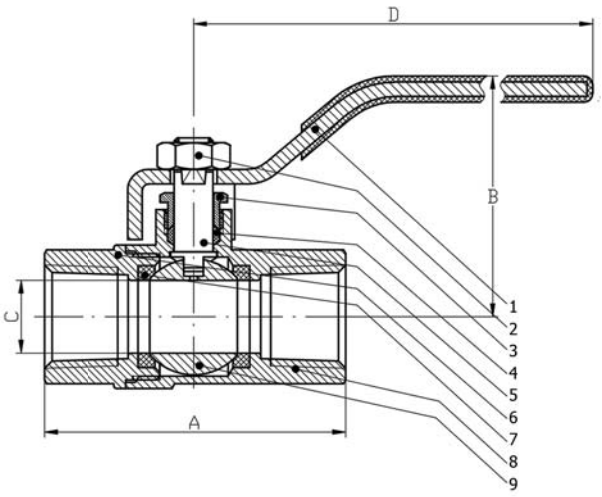
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

B Series Forged Brass Ball Valves

B-1-F

5.1

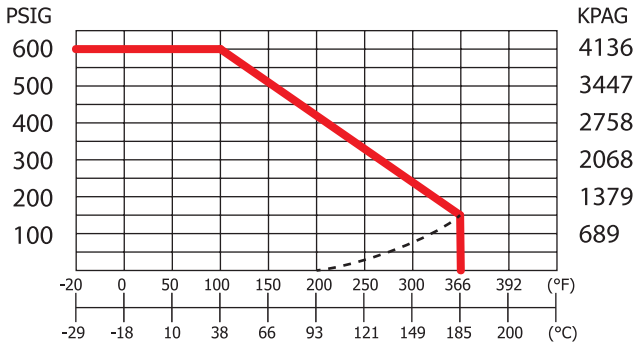




- Forged 2 piece construction
- Full port
- ASME B1.20.1 NPT ends
- Blowout-proof stem, Chrome plated ball
- Adjustable packing gland
- Class 150 WSP, 600 WOG
- Certified to: CSA 9.1 / ANSI Z21.15 (1/2 PSIG) - 1/4"-2"
- CGA-CR91-002/ASME B16.44 (5PSIG) - 1/4"-2"
- CGA-3.16/ASME B16.33 (125 PSIG) - 1/4" - 2"
- -40° to 120° F
- UL, MHKZ, YQNZ, YRBX, YRPV, YSDT

- Suitable for use with natural gas, manufactured gas and liquefied petroleum gases (distributed as vapour with or without the admixture of air), or mixtures thereof. Not for use on "Sour Gas".

PRESSURE TEMPERATURE RATING



B-1-F PART / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Lever	Steel ASTM A36 ZINC PLATED
2	Lever Nut	Steel ASTM A36 ZINC PLATED
3	Packing Nut	Brass ASTM B124-C37700
4	Packing	PTFE
5	Stem	Brass ASTM B124-C37700
6	Cap	Brass ASTM B283-C37700
7	Seats	PTFE
8	Body	Brass ASTM B283-C37700
9	Ball	ASTM B124-C37700 Chrome Plated

B-1-F DIMENSIONS						
Size	**A** mm/in	**B** mm/in	**C** mm/in	**D** mm/in	**CV**	**Weight** Kg/LBS
1/4"	44.5	39.3	10	90	8	0.128
	1.75	1.55	0.39	3.54		0.282
3/8"	44.5	39.3	10	90	8	0.133
	1.75	1.55	0.39	3.54		0.293
1/2"	54.6	42.3	14.5	90	15	0.193
	2.15	1.67	0.57	3.54		0.425
3/4"	60.8	50.0	19.5	98	30	0.285
	2.39	1.97	0.77	3.86		0.628
1"	73.6	62	25	118	60	0.479
	2.9	2.44	0.98	4.65		1.06
1 1/4"	84	70	32	128	110	0.692
	3.307	2.75	1.26	5.04		1.54
1 1/2"	95.5	80	39	140	130	1.072
	3.76	3.15	1.535	5.51		2.38
2"	108	85.3	49.5	140	360	1.46
	4.25	3.36	1.95	5.51		3.216
2 1/2"	138.6	117	64	220	450	3.397
	5.46	4.606	2.52	8.66		7.482
3"	153.3	124.3	74	220	620	4.455
	6.04	4.894	2.91	8.66		9.813
4"	187	140	95	244	1200	7.841
	7.36	5.512	3.74	9.61		17.27

* NOTES:
1) UL listings are not applicable to 2 1/2"-4"

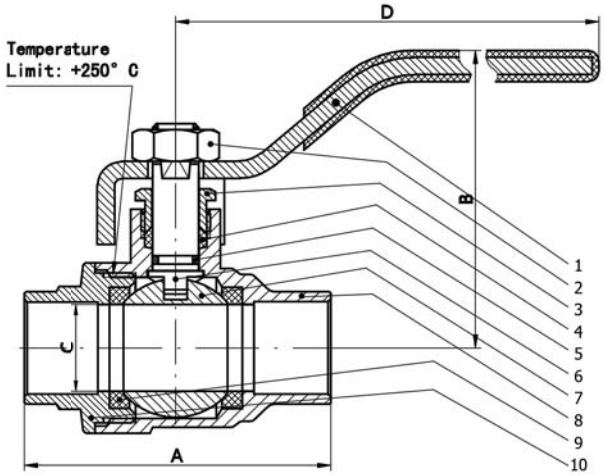
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

B Series Forged Brass Ball Valves

B-2-F

5.2

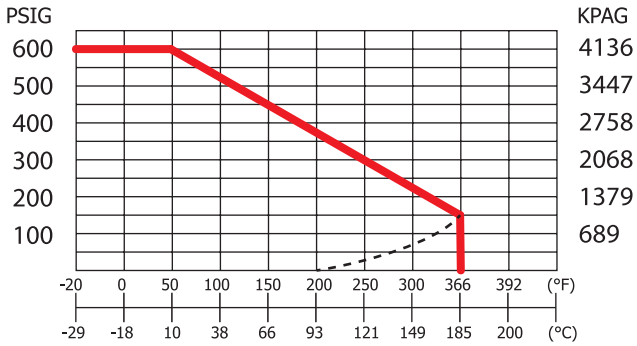




- Forged 2 piece construction
- Full port
- ANSI B16.22 solder ends (CXC)
- Blowout-proof stem
- Chrome plated ball
- Adjustable packing gland
- Secondary stem seal
- 150 WSP, 600 WOG


Secondary Stem Seal

PRESSURE TEMPERATURE RATING



B-2-F PART/MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Lever	Steel ASTM A36 Zinc Plated
2	Lever Nut	Steel ASTM A36 Zinc Plated
3	Packing Nut	ASTM B124 C37700
4	Packing	PTFE
5	O-ring	FKM
6	Stem	Brass ASTM B124 C37700
7	Ball	Brass ASTM B124 C37700 Chrome Plated
8	Body	Brass ASTM B283 C37700
9	Seats	PTFE
10	Cap	Brass ASTM B283 C37700

B-2-F DIMENSIONS						
Size	**A** mm/in	**B** mm/in	**C** mm/in	**D** mm/in	**CV**	**Weight** Kg/LBS
1/4"	43.00	40.80	8.00	90.00	8	0.124
	1.693	1.606	0.32	3.54		0.273
3/8"	44.50	40.80	10.00	90.00	8	0.124
	1.752	1.606	0.39	3.54		0.273
1/2"	54.30	45.00	14.50	90.00	15	0.168
	2.14	1.772	0.57	3.54		0.37
3/4"	71.40	50.00	19.50	98.00	30	0.277
	2.81	1.969	0.77	3.858		0.611
1"	86.30	63.00	25.00	118.00	60	0.446
	3.40	2.48	0.98	4.646		0.983
1 1/4"	99.20	68.00	32.00	128.00	110	0.643
	3.905	2.68	1.26	5.04		1.416
1 1/2"	115.80	82.00	39.00	140.00	130	1.086
	4.56	3.23	1.535	5.51		2.392
2"	139.80	90.00	49.50	140.00	360	1.484
	5.504	3.54	1.95	5.51		3.269
2 1/2"	164.60	120.00	64.00	220.00	450	3.239
	6.48	4.72	2.52	8.66		7.134
3"	185.30	127.50	74.00	220.00	620	4.376
	7.30	5.02	2.91	8.66		9.639
4"	239.80	142.50	95.00	244.00	1200	7.869
	9.44	5.61	3.74	9.61		17.33

*NOTES:
1) The safe working pressure-temperature rating for a solder joint piping system is dependent not only on valve seat rating but also on the limitation of the solder used for the joints. Refer to ANSI B16-22, Table I.1 for the Maximum recommended pressure-temperature ratings for solder joints.
2) Exercise caution during installation by applying heat away from the valve body. Excessive direct flame may damage body seats and seals.

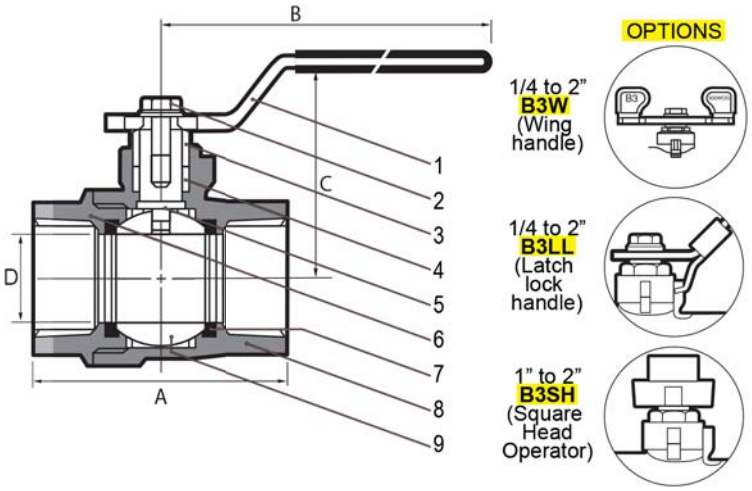
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

B Series Forged Brass Ball Valves

B-3



LISTED 5SAO Trim & Drain



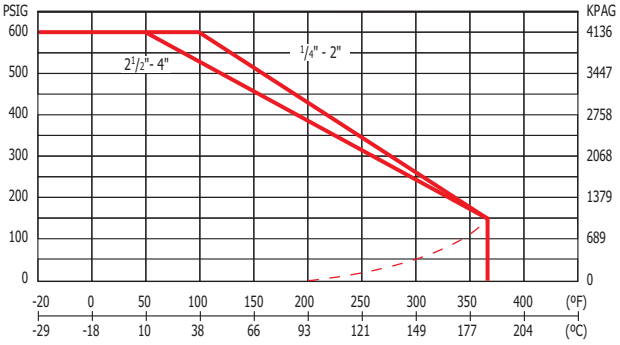
- Forged 2 piece construction, Full port
- ANSI B1.20.1 NPT ends
- Blowout-proof stem, Chrome plated ball
- Adjustable packing gland
- Class 150 WSP, 600 WOG
- Certified to:
  ANSI Z21.15/CSA 9.1 (1/2 PSIG)
  ASME B16.44/CGA-CR91-002 (2 & 5 PSIG)
  ASME B16.33/CGA-3.16 (125 PSIG)
  -40° to 120°F
  cULus 55AO Trim&Drain

B-3-SS-LL (SS Trim) is available for 1/4" to 2"

B-3 PART/MATERIAL			
NO.	**PART NAME**	**B3 MATERIAL**	**B-3-SS-LL MATERIAL**
1	Lever	Steel ASTM A36	(AISI 430SS)
2	Lever Screw	Steel ASTM A36	(AISI 430SS)
3	Packing Nut	Brass ASTM B124-C37700	
4	Packing	PTFE	
5	Stem	Brass ASTM B124-C37700	(ASTM A276 Type 316SS)
6	Cap	Brass ASTM B283-C37700	
7	Seats	PTFE	
8	Body	Brass ASTM B283-C37700	
9	Ball	Brass ASTM B124-C37700 Chrome Plated	(ASTM A276 Type 316SS)
10	Wing and Latch lock handles	Steel A36 Zinc Plated	

B-3 DIMENSIONS											
Size	**1/4"**	**3/8"**	**1/2"**	**3/4"**	**1"**	**1 1/4"**	**1 1/2"**	**2"**	***2 1/2"**	***3"**	***4"**
A	44	44	54	62.2	72.4	83.2	96.4	110.3	150	173.2	192
mm/in	1.73	1.73	2.12	2.44	2.84	3.27	3.79	4.34	5.90	6.81	7.55
B	81	81	91.5	91.5	126.5	126.5	141.5	141.5	281	281	281
mm/in	3.18	3.18	3.60	3.60	4.98	4.98	5.57	5.57	11.06	11.06	11.06
C	39	39	53.4	57	65.3	70	83	90.5	118	130	143
mm/in	1.55	1.54	2.12	2.26	2.57	2.76	3.28	3.58	4.65	5.20	5.62
D	10	10	15	20	25	32	40	50	65	80	100
mm/in	0.39	0.39	0.59	0.78	0.98	1.25	1.57	1.96	2.55	3.14	3.93
CV	8	8	15	30	60	110	130	360	450	620	1200
Weight	0.25	0.25	0.50	0.75	1.2	1.8	2.7	3.9	8.4	11	16.5
lb/kg	0.12	0.12	0.23	0.34	0.55	0.82	1.23	1.8	3.8	5.0	9.5

PRESSURE TEMPERATURE RATING



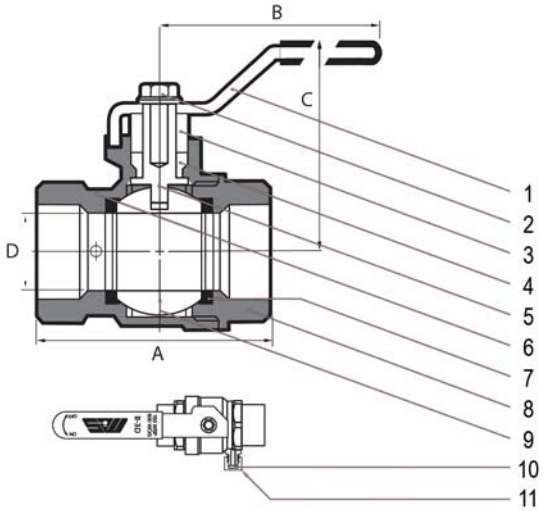
*NOTES:
1) 2 1/2" and 3" sizes are certified for 1/2 to 5 PSIG gas services only
2) Gas certifications listed are not applicable to 4" size.
3) UL listings are not applicable to 2 1/2" – 4"

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

B Series
Forged Brass
Ball Valve with Drain

B-3D



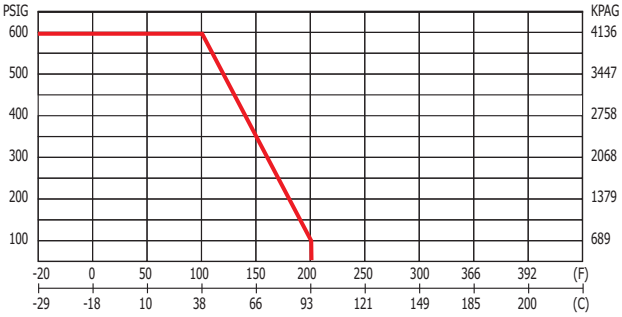


- Forged 2 piece construction
- Full port
- ANSI B1.20.1 NPT ends
- Blowout-proof stem
- Chrome plated ball
- Adjustable packing gland
- Class 150, 600 WOG

B-3D PART/MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Lever	Steel ASTM A36
2	Lever Screw	Steel ASTM A36
3	Packing Nut	Brass ASTM B124-C37700
4	Packing	PTFE
5	Stem	Brass ASTM B124-C37700
6	Cap	Brass B-283-C37700
7	Seat	PTFE
8	Body	Brass B-283-C37700
9	Ball	Brass B124 / B283-C37700 Chrome plated
10	Drain Cap Washer	NBR
11	Drain Cap	Brass B124-C37700

B-3D DIMENSIONS			
Size	**1/2"**	**3/4"**	**1"**
A	61.5	70.6	81.0
mm/in	2.42	2.77	3.18
B	91.5	91.5	126.5
mm/in	3.60	3.60	4.98
C	54.4	57.8	66.3
mm/in	2.14	2.28	2.61
D	15.0	20.0	25.0
mm/in	0.59	0.78	0.98
CV	15	30	60
Weight	0.56	0.78	1.25
lb/kg	0.26	0.36	0.57

PRESSURE TEMPERATURE RATING



*NOTES:
1) It is not recommended to use this drain feature valve in any hostile fluid, gas or high temperature application.
2) Always depressurize the system before removing the drain cap.

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

B Series Lead Free Forged Brass Ball Valves

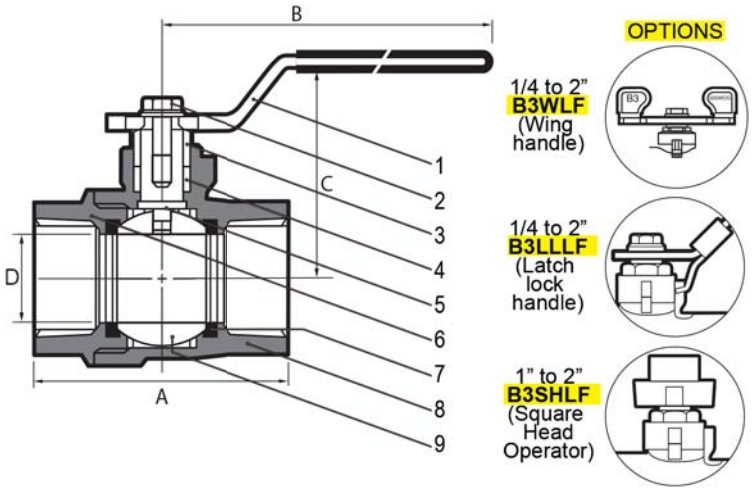
Meeting the Industry's Lowest Lead-free Requirements

B-3-LF

5.5



LISTED 5SAO
Trim & Drain



- Forged 2 piece construction, Full port
- ANSI B1.20.1 NPT ends
- Blowout-proof stem, Chrome plated ball
- Adjustable packing gland
- Class 150 WSP, 600 WOG

- Certified to:
  ANSI Z21.15/CSA 9.1 (1/2 PSIG)
  ASME B16.44/CGA-CR91-002 (2 & 5 PSIG)
  ASME B16.33/CGA-3.16 (125 PSIG)
  -40° to 149°F
  cULus 55AO Trim&Drain

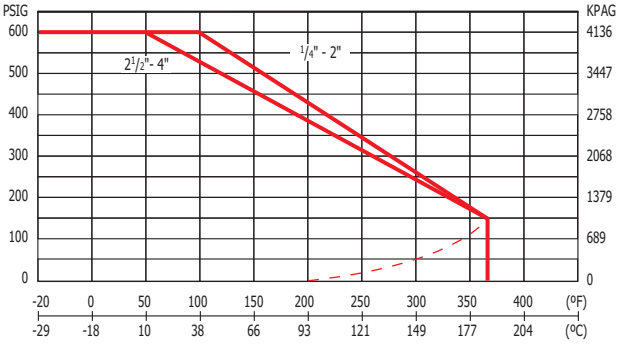
NSF/ANSI 61 drinking water system components

NSF/ANSI 372 lead free (0.25% max lead content)

B-3-LF PART/MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Lever	Steel ASTM A36 Zinc Plated
2	Lever Screw	Steel ASTM A36 Zinc Plated
3	Packing Nut	Brass ASTM B124-C37700
4	Packing	PTFE
5	Stem	Brass ASTM DS-561 C28500 (AB)
6	Cap	Brass ASTM DS-561 C28500 (AB)
7	Seats	PTFE
8	Body	Brass ASTM DS-561 C28500 (AB)
9	Ball	Brass ASTM DS-561 C28500 (AB) Chrome Plated
10	Wing and Latch lock handles	Steel A36 Zinc Plated

B-3-LF DIMENSIONS											
Size	**1/4"**	**3/8"**	**1/2"**	**3/4"**	**1"**	**1 1/4"**	**1 1/2"**	**2"**	***2 1/2"**	***3"**	***4"**
A	44	44	54	62.2	72.4	83.2	96.4	110.3	150	173.2	192
mm/in	1.73	1.73	2.12	2.44	2.84	3.27	3.79	4.34	5.90	6.81	7.55
B	81	81	91.5	91.5	126.5	126.5	141.5	141.5	281	281	281
mm/in	3.18	3.18	3.60	3.60	4.98	4.98	5.57	5.57	11.06	11.06	11.06
C	39	39	53.4	57	65.3	70	83	90.5	118	130	143
mm/in	1.55	1.54	2.12	2.26	2.57	2.76	3.28	3.58	4.65	5.20	5.62
D	10	10	15	20	25	32	40	50	65	80	100
mm/in	0.39	0.39	0.59	0.78	0.98	1.25	1.57	1.96	2.55	3.14	3.93
CV	8	8	15	30	60	110	130	360	450	620	1200
Weight	0.25	0.25	0.50	0.75	1.2	1.8	2.7	3.9	8.4	11	16.5
lb/kg	0.12	0.12	0.23	0.34	0.55	0.82	1.23	1.8	3.8	5.0	9.5

PRESSURE TEMPERATURE RATING



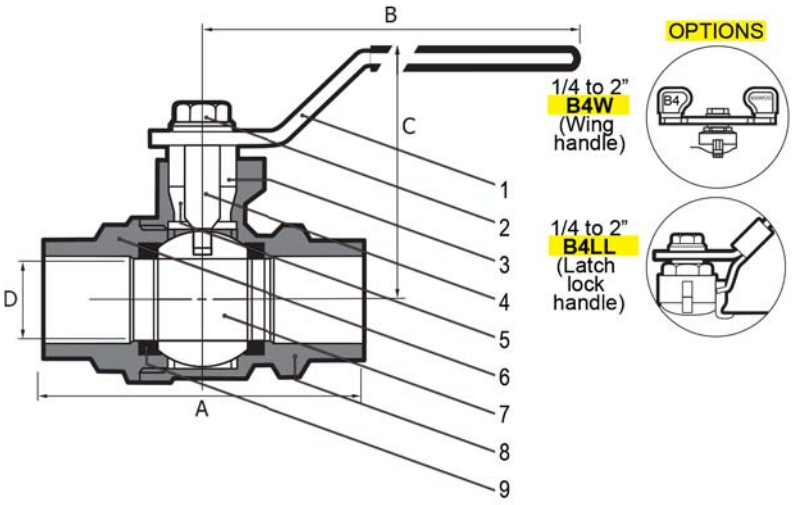
*NOTES:
1) 2 1/2" and 3" sizes are certified for 1/2 to 5 PSIG gas services only
2) Gas certifications listed are not applicable to 4" size.
3) UL listings are not applicable to 2 1/2" – 4"

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

B Series Forged Brass Ball Valves

B-4





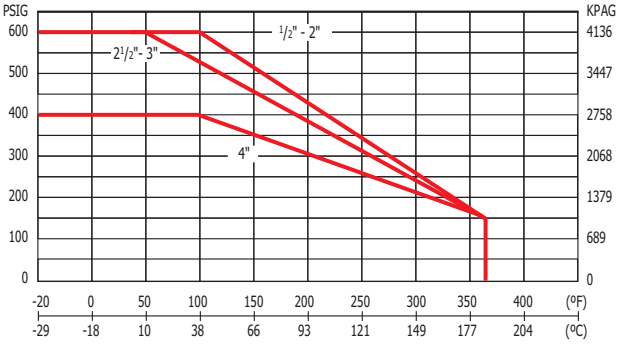
- Forged 2 piece construction
- Full port
- ANSI B16.22 solder ends (CXC)
- Blowout-proof stem
- Chrome plated ball
- Adjustable packing gland
- Class 150, 600 WOG

B-4-SS-LL (SS Trim) is available for 1/4" to 2"

B-4 PART/MATERIAL			
NO.	**PART NAME**	**B4 MATERIAL**	**B-4-SS-LL MATERIAL**
1	Lever	Steel ASTM A36	AISI 430SS
2	Lever Screw	Steel ASTM A36	AISI 430SS
3	Packing Nut	Brass ASTM B124-C37700	
4	Stem	Brass ASTM B124-C37700	ASTM A276 Type 316SS
5	Packing	PTFE	
6	Cap	Brass ASTM B283-C37700	
7	Ball	Brass ASTM B124-C37700 Chrome Plated	ASTM A276 Type 316SS
8	Body	Brass ASTM B283-C37700	
9	Seats	PTFE	(ASTM A276 Type 316SS)
10	Wing and Latch lock handles	Steel ASTM A36 Zinc Plated	

B-4 DIMENSIONS									
Size	**1/2"**	**3/4"**	**1"**	**1 1/4"**	**1 1/2"**	**2"**	**2 1/2"**	**3"**	**4"**
A	53.5	73	86	99	115	140	169	196	237
mm/in	2.12	2.87	3.38	3.89	4.57	5.51	6.65	7.72	9.33
B	91.5	91.5	126.5	126.5	141.5	141.5	280	280	281
mm/in	3.60	3.60	4.98	4.98	5.57	5.57	11.02	11.02	11.06
C	54	57	65	70	83	90	119	130	143
mm/in	2.12	2.26	2.62	2.83	3.23	3.54	4.69	5.12	5.63
D	15	20	25	32	40	50	65	78	100
mm/in	0.59	0.78	0.98	1.25	1.57	1.96	2.56	3.07	3.94
CV	15	30	60	110	130	360	450	620	1200
Weight	0.45	0.65	1.0	1.5	2.4	3.8	7.5	10.4	17.2
lb/kg	0.21	0.30	0.46	0.69	1.0	1.7	3.4	4.7	7.8

PRESSURE TEMPERATURE RATING



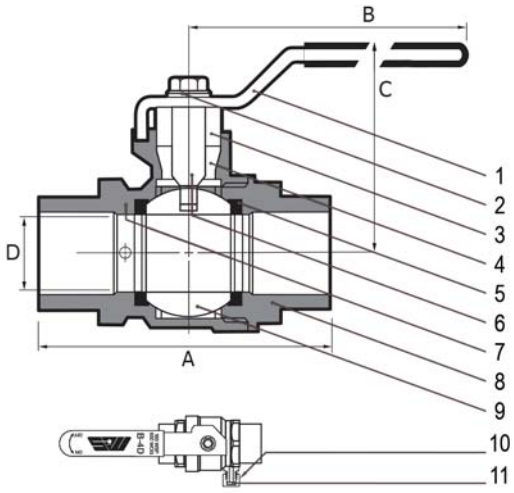
*NOTES:
1) The safe working pressure-temperature rating for a solder joint piping system is dependent not only on valve seat rating but also on the limitations of the solder used for the joints. Refer to ANSI B16-22 - Table I.1 for the Maximum recommended pressure-temperature ratings for solder joints.
2) Exercise caution during installation by applying heat away from the valve body. Excessive direct flame may damage body seats and seals.

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

B Series
Forged Brass
Ball Valves with Drain

B-4D



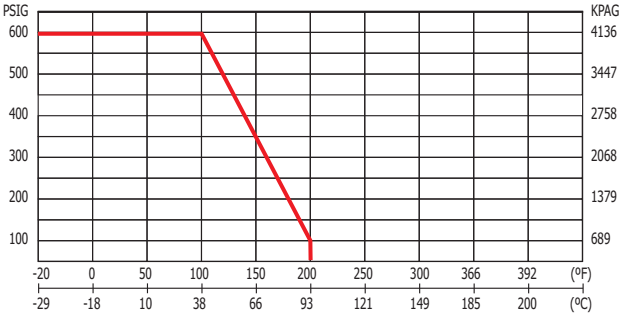


- Forged 2 piece construction
- Full port
- ANSI B16.22 solder ends (CXC)
- Blowout-proof stem
- Chrome plated ball
- Adjustable packing gland
- Class 150, 600 WOG

B-4D PART/MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Lever	Steel ASTM A36
2	Lever Screw	Steel ASTM A36
3	Packing Nut	Brass ASTM B124-C37700
4	Packing	PTFE
5	Seats	PTFE
6	Stem	Brass ASTM B124-C37700
7	Cap	Brass ASTM B-283-C37700
8	Body	Brass ASTM B-283-C37700
9	Ball	Brass ASTM B283 / B124-C37700 Chrome Plated
10	Drain Cap	ASTM Brass B124-C37700
11	Drain Cap Washer	NBR

B-4D DIMENSIONS			
Size	**1/2"**	**3/4"**	**1"**
A	58	76.5	89.5
mm/in	2.28	3.01	3.52
B	91.5	91.5	126.5
mm/in	3.60	3.60	4.98
C	54.4	57.5	65.3
mm/in	2.15	2.27	2.57
D	15.0	20.0	25.0
mm/in	0.59	0.79	0.99
CV	15	30	60
Weight	0.50	0.75	1.2
lb/kg	0.23	0.34	0.55

PRESSURE TEMPERATURE RATING



*NOTES:
1) The safe working pressure-temperature rating for a solder joint piping system is dependent not only on valve seat rating but also on the limitations of the solder used for the joints. Refer to ANSI B16-22 - Table I.1 for the maximum recommended pressure-temperature ratings for solder joints.
2) Exercise caution during installation by applying heat away from the valve body. Excessive direct flame may damage body seats and seals.
3) It is not recommended to use this drain feature valve with any hostile fluid, gas or high temperature application.
4) Always depressurize the system before removing the drain cap.

Technical data, dimensions, materials & specifications are subject to change without notice. MAS CA JUNE 18 2018

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

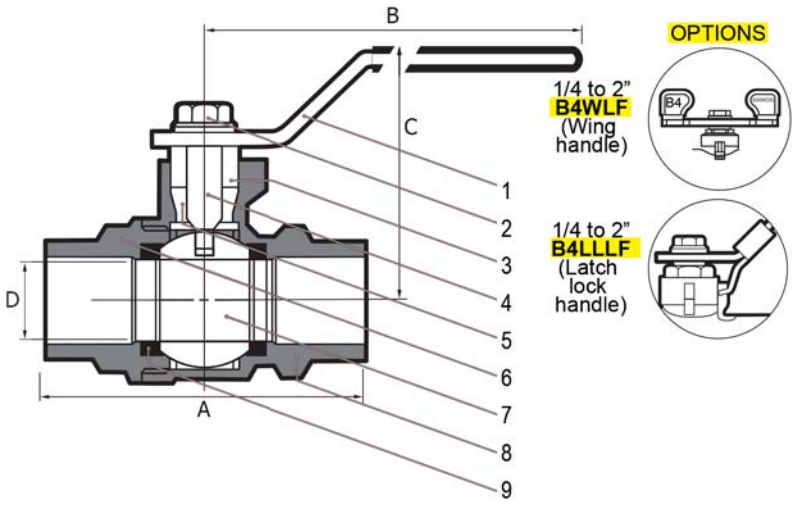
B Series Lead Free Forged Brass Ball Valves

Meeting the Industry's Lowest Lead-free Requirements

B-4-LF

5.8





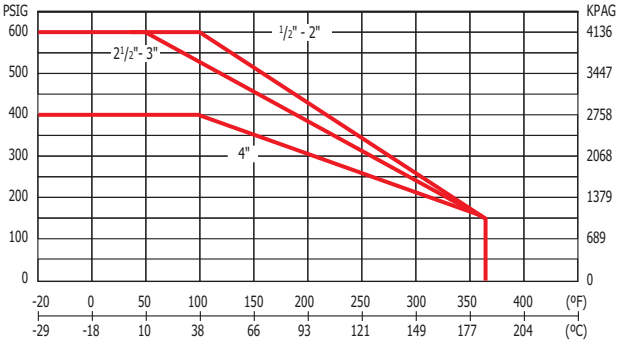
- Forged 2 piece construction
- Full port
- ANSI B16.22 solder ends (CXC)
- Blowout-proof stem
- Chrome plated ball
- Adjustable packing gland
- Class 150, 600 WOG

NSF/ANSI 61 drinking water system components
NSF/ANSI 372 lead free (0.25% max lead content)

B-4-LF PART/MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Lever	Steel ASTM A36 Zinc Plated
2	Lever Screw	Steel ASTM A36 Zinc Plated
3	Packing Nut	Brass ASTM B124-C37700
4	Stem	Brass DS-561 C28500 (AB)
5	Packing	PTFE
6	Cap	Brass ASTM DS-561 C28500 (AB)
7	Ball	Brass ASTM DS-561 C28500 (AB) Chrome Plated
8	Body	Brass ASTM DS-561 C28500 (AB)
9	Seats	PTFE
10	Wing and Latch lock handles	Steel A36 Zinc Plated

B-4-LF DIMENSIONS									
Size	**1/2"**	**3/4"**	**1"**	**1 1/4"**	**1 1/2"**	**2"**	**2 1/2"**	**3"**	**4"**
A	53.5	73	86	99	115	140	169	196	237
mm/in	2.12	2.87	3.38	3.89	4.57	5.51	6.65	7.72	9.33
B	91.5	91.5	126.5	126.5	141.5	141.5	280	280	281
mm/in	3.60	3.60	4.98	4.98	5.57	5.57	11.02	11.02	11.06
C	54	57	65	70	83	90	119	130	143
mm/in	2.12	2.26	2.62	2.83	3.23	3.54	4.69	5.12	5.63
D	15	20	25	32	40	50	65	78	100
mm/in	0.59	0.78	0.98	1.25	1.57	1.96	2.56	3.07	3.94
CV	15	30	60	110	130	360	450	620	1200
Weight	0.45	0.65	1.0	1.5	2.4	3.8	7.5	10.4	17.2
lb/kg	0.21	0.30	0.46	0.69	1.0	1.7	3.4	4.7	7.8

PRESSURE TEMPERATURE RATING



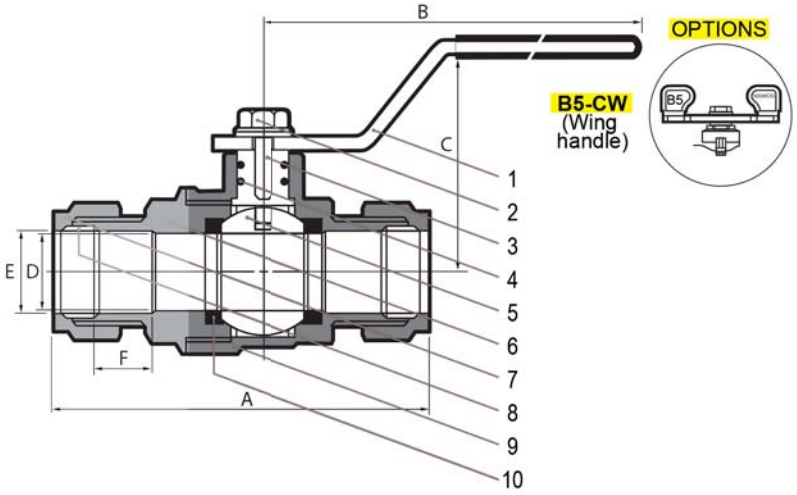
*NOTES:
1) Use 95.5 Tin Antimony ASTM B32 Alloy Grade 9.5 TA solder.
2) The safe working pressure-temperature rating for a solder joint piping system is dependent not only on valve seat rating but also on the limitations of the solder used for the joints. Refer to ANSI B16-22 - Table I.1 for the Maximum recommended pressure-temperature ratings for solder joints.
3) Exercise caution during installation by applying heat away from the valve body. Excessive direct flame may damage body seats and seals.

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

B Series
Compression End
Forged Brass Ball Valves

B-5C



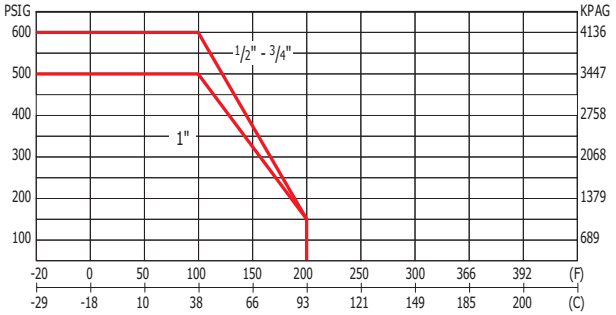


- Forged 2 piece construction
- Full port
- **Compression ends for use with type K L & M copper tube**
- Blowout-proof stem
- Chrome plated ball
- Class 150, 600 WOG (1/2" & 3/4") 500 WOG (1")

B-5C PART/MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Lever	Steel ASTM A36
2	Lever Screw	Steel ASTM A36
3	Stem	Brass ASTM B124-C37700
4	O Ring	NBR
5	Ball	Brass ASTM B283-C37700 Chrome Plated
6	Cap	Brass ASTM B283-C37700
7	End Nut	Brass ASTM B283-C37700
8	Ferrule	Brass ASTM C27200
9	Body	Brass ASTM B283-C37700
10	Seats	PTFE
11	Wing Handle	Steel Zinc Plated

B-5C DIMENSIONS								
Size (mm/in)	**A**	**B**	**C**	**D**	**E**	**F**	**CV**	**Weight lb/kg**
1/2"	75	91.5	45	15	15.97	12.7	15	0.6
	2.95	3.60	1.77	0.61	0.65	0.52		0.28
3/4"	87	91.5	48.5	20	22.32	14	30	0.85
	3.42	3.60	1.98	0.79	0.91	0.57		0.39
1"	96	126.5	52.5	25	28.7	16	60	1.30
	3.77	4.98	2.07	0.98	1.17	0.65		0.59

PRESSURE TEMPERATURE RATING



*NOTES:
Compression end limits below;
- 300 PSIG @ 15F to 160F (-9.4C to 71C)
- 150 PSIG @ 200F (93C)

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

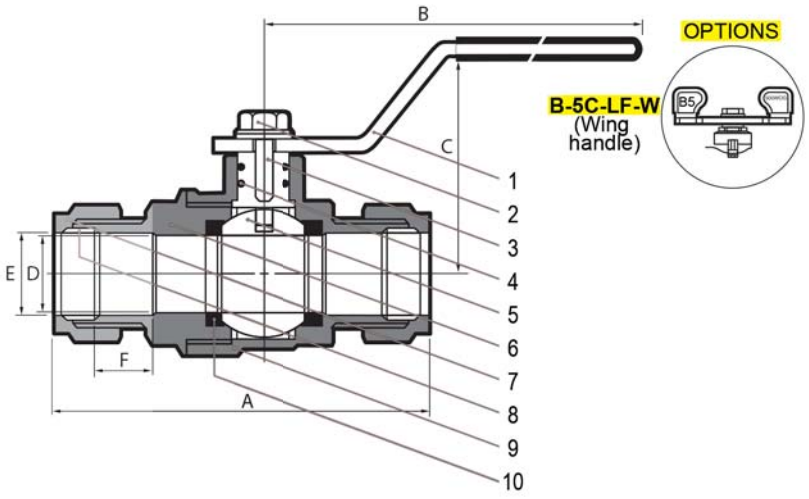
B Series Lead Free Compression End Forged Brass Ball Valves

Meeting the Industry's Lowest Lead-free Requirements

B-5C-LF

5.10





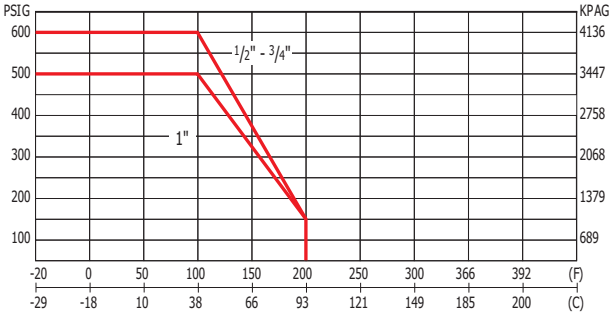
- Forged 2 piece construction
- Full port
- **Compression ends for use with type K L & M copper tube**
- Blowout-proof stem
- Chrome plated ball
- Class 150, 600 WOG (1/2" & 3/4") 500 WOG (1")

NSF/ANSI 61 drinking water system components
NSF/ANSI 372 lead free (0.25% max lead content)

B-5C-LF PART/MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Lever	Steel ASTM A36
2	Lever Screw	Steel ASTM A36
3	Stem	Brass ASTM DS-561 C28500AB
4	O Ring	NBR NSF Approved
5	Ball	Brass ASTM DS-561 C28500AB Chrome Plated
6	Cap	Brass ASTM DS-561 C28500AB
7	End Nut	Brass ASTM B283-C37700
8	Ferrule	Brass ASTM C27200
9	Body	Brass ASTM DS-561 C28500AB
10	Seats	PTFE
11	Wing Handle	Steel Zinc Plated

B-5C-LF DIMENSIONS								
Size (mm/in)	**A**	**B**	**C**	**D**	**E**	**F**	**CV**	**Weight lb/kg**
1/2"	73.7	91.5	45.2	14.9	15.93	12.7	15	0.6
	2.90	3.60	1.78	0.59	0.627	0.50		0.28
3/4"	87.1	91.5	48.5	20	22.35	13.9	30	0.85
	3.43	3.60	1.91	0.79	0.880	0.55		0.39
1"	100.3	126.5	52.5	25	28.65	16	60	1.30
	3.95	4.98	2.07	0.98	1.128	0.63		0.59

PRESSURE TEMPERATURE RATING



*NOTES:
Compression end limits below;
- 300 PSIG @ 15F to 160F (-9.4C to 71C)
- 150 PSIG @ 200F (93C)

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

B Series Lead Free Forged Brass PEX Ball Valves

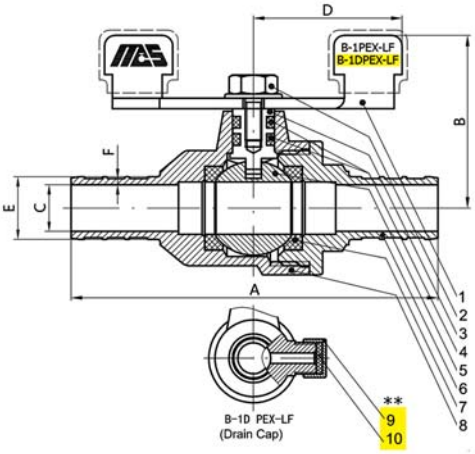
Meeting the Industry's Lowest Lead-free Requirements

B-1PEX-LF / B-1DPEX-LF 5.11

NSF-61/372







- Forged 2-piece construction
- Reduced port
- CSA B137.5 ASTM F1807 PEX ends
- Blowout-proof stem
- Chrome plated ball
- O-ring stem seals
- 400 WOG
- CSA B125.3-12 Plumbing Fittings / ASME 112.4.14
- NSF/ANSI 61 Drinking Water System Components
- NSF/ANSI 372 Lead Free (0.25% max lead content)
- ** Drain available on model B-1DPEX-LF

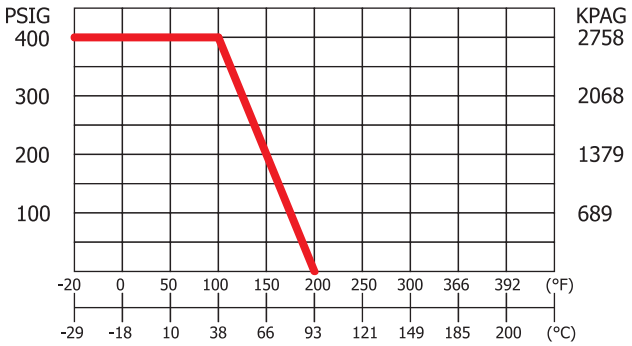
B-1PEX-LF | B-1-D-PEX-LF PART/MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle	Steel ASTM A36 ZINC PLATED
2	Handle NUT	Steel ASTM A36 ZINC PLATED
3	Stem	Brass ASTM B432 C46500
4	O Ring	NBR
5	Ball	Brass ASTM B432 C46500 Chrome Plated
6	Cap	Brass ASTM B432 C46500
7	Seat	PTFE
8	Body	Brass ASTM B432 C46500
9	** Drain Cap	Brass ASTM C37700
10	** Drain Cap Washer	NBR

B-1PEX-LF | B-1-D-PEX-LF DIMENSIONS										
Size	**A** mm/in	**** A** mm/in	**B** mm/in	**C** mm/in	**D** mm/in	**E** mm/in	**F** mm/in	**CV**	**** Weight** Kg/LBS	**Weight** Kg/LBS
1/2"	63	68.5	33.5	8.95	27	11.96	0.828Min	7	0.123	0.102
	2.48	2.697	1.319	0.352	1.102	0.471	0.033Min		0.271	0.225
3/4"	68.3	74	36.5	13.22	27	16.94	1.081Min	13	0.187	0.158
	2.69	2.913	1.437	0.52	1.102	0.667	0.043Min		0.412	0.348
1"	85.4	91	42.7	17.79	27	21.74	1.196Min	27	0.312	0.270
	3.362	3.583	1.72	0.7	1.102	0.856	0.047Min		0.688	0.595

Table A1: Pressure Rating for PEX SDR9 Water Distribution Systems

Rated Temperature °C / °F	Pressure Rating for Water KPA / (PSI)
23 / 73	1105 / (160)
82 / 180	690 / (100)
93 / 200	550 / (80)

PRESSURE TEMPERATURE RATING



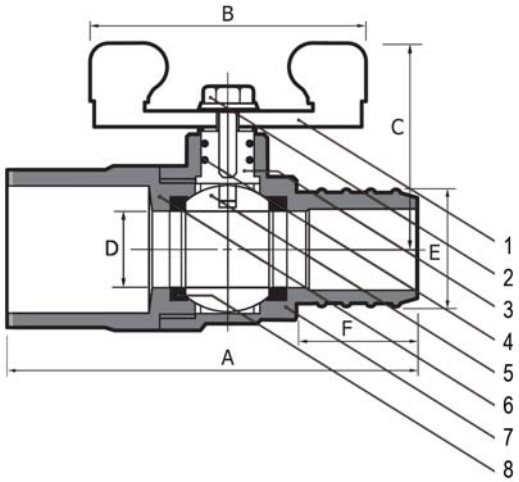
*NOTES:
1) The safe working pressure-temperature rating for this valve in a PEX piping system is dependent not only on the valve rating but also the limitations of the PEX pipe used. Refer to the CSA-B137 standard Table A1 above for these limits.
2) It is not recommended to use the drain feature valve B-1D PEX with any hostile fluid, gas or high temperature application.
3) Always depressurize system before removing the B-1D PEX drain cap.

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

B Series
Forged Brass PEX X Solder Ball Valve

B-2PEX





- Forged 2-piece construction
- Reduced port
- B16.22 solder end X ASTM F1807-08 PEX end (CXPEX)
- Blowout-proof stem
- Chrome plated ball
- O-ring stem seals
- *400 WOG

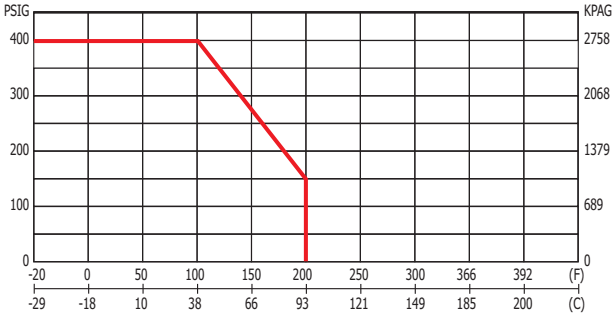
B-2PEX PART/MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle	Steel ASTM A36
2	Lever Screw	Steel ASTM A36
3	Stem	Brass ASTM B124-C37700
4	O-Ring	NBR
5	Ball	Brass ASTM B124-C37700 Chrome Plated
6	Cap	Brass B283-C37700.
7	Body	Brass B283-C37700
8	Seat	PTFE

B-2PEX DIMENSIONS								
Size (mm/in)	**A**	**B**	**C**	**D**	**E**	**F**	**CV**	**Weight lb/kg**
1/2"	54.1	26.2	39.9	8.9	12.0	16.0	7	0.243
	2.13	1.03	1.57	0.35	0.47	0.63		0.11
3/4"	60.9	26.2	41.9	13.5	16.9	16.0	13	0.324
	2.40	1.03	1.65	0.53	0.67	0.63		0.15

Table A1: Pressure Rating for PEX SDR9 Water Distribution Systems

Rated Temperature °C / °F	Pressure Rating for Water KPA / (PSI)
23 / 73	1105 / (160)
82 / 180	690 / (100)
93 / 200	550 / (80)

PRESSURE TEMPERATURE RATING



*NOTES:
1) The safe working pressure-temperature rating for a solder joint piping system is dependent not only on valve seat rating but also on the limitation of the solder used for the joints. Refer to ANSI B16-22, Table I.1 for the Maximum recommended pressure-temperature ratings for solder joints.
2) Exercise caution during installation by applying heat away from the valve body. Excessive direct flame may damage body seats and seals.
3) The safe working pressure-temperature rating for this valve in a PEX piping system is dependent not only on the valve seat rating but also the limitations of the PEX pipe used. Refer to the CSA-B137 standard Table A1 below for these limits.

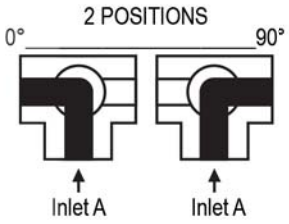
Technical data, dimensions, materials & specifications are subject to change without notice. MAS CA JUNE 18 2018

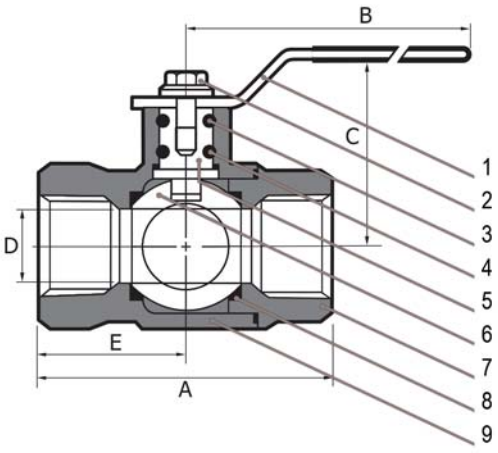
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

B Series
Forged Brass, 3-Port
Diverter Ball Valves

B3-L





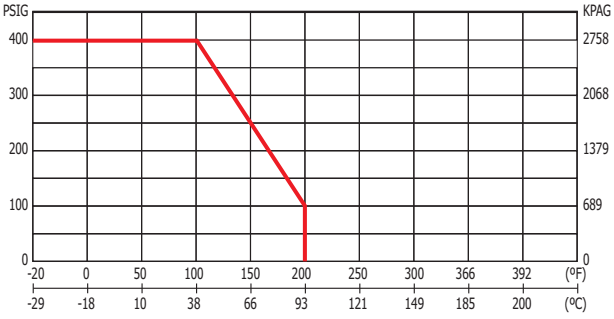


- Forged 2 piece construction
- Reduced L-Port
- 2 seat design
- ANSI B1.20.1 NPT ends
- Blowout-Proof Stem
- Chrome Plated Ball
- Oring stem seals
- Panel Mounting Holes
- Class 150, 400 WOG

B3-L PART/MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Lever	Steel ASTM A36.
2	Lever Screw	Steel ASTM A36.
3	Stem O Ring	NBR
4	Stem O Ring	Viton
5	Stem	Brass ASTM B124-C37700
6	Ball	Brass ASTM B124-C37700 Chrome Plated
7	Cap	Brass ASTM B283-C37700
8	Seat	PTFE
9	Body	Brass ASTM B283-C37700

B3-L DIMENSIONS									
Size	**3/8”**	**1/2”**	**3/4”**	**1”**	**1 1/4”**	**1 1/2”**	**2”**	**2 1/2”**	**3”**
A	49.0	56.0	68.0	80.0	91.0	102.0	120.0	142.0	169.0
mm/in	1.93	2.20	2.68	3.15	3.58	4.02	4.72	5.59	6.65
B	81.0	81.0	91.5	91.5	126.5	126.5	141.5	141.5	281.3
mm/in	3.19	3.19	3.60	3.60	4.98	4.98	5.57	5.57	11.07
C	34.5	34.5	47.5	50.5	54.0	59.5	73.4	81.5	103.3
mm/in	1.36	1.36	1.87	1.99	2.13	2.34	2.89	3.21	4.07
D	10.0	10.0	15.2	20.2	25.0	32.0	40.0	50.0	65.0
mm/in	0.39	0.39	0.59	0.80	0.98	1.26	1.57	1.97	2.56
E	28.5	28.5	34.0	40.0	45.5	51.0	60.0	71.0	84.5
mm/in	0.96	0.96	1.34	1.57	1.79	2.01	2.36	2.80	3.33
CV	1.2	3	5.5	12	18	30	39	65	115
Weight	0.08	0.09	0.17	0.25	0.41	0.60	1.01	1.70	2.66
lb/kg	0.167	0.205	0.384	0.551	0.896	1.315	2.215	3.750	5.851

PRESSURE TEMPERATURE RATING



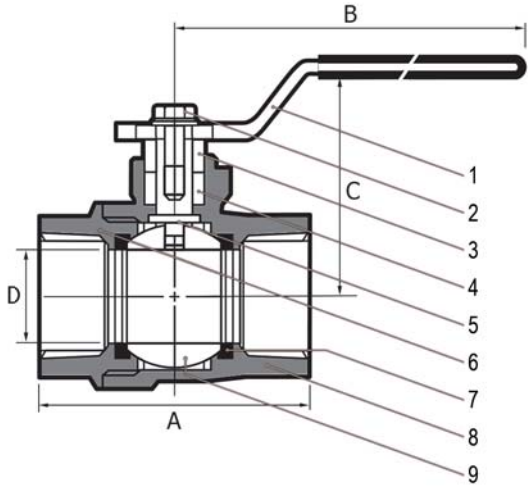
*NOTES:
1) The flow path pressure (A to B, or A to C) must exceed any closed port back pressure for proper seat sealing.

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

BZ Series Cast Bronze Ball Valves

BZ-3



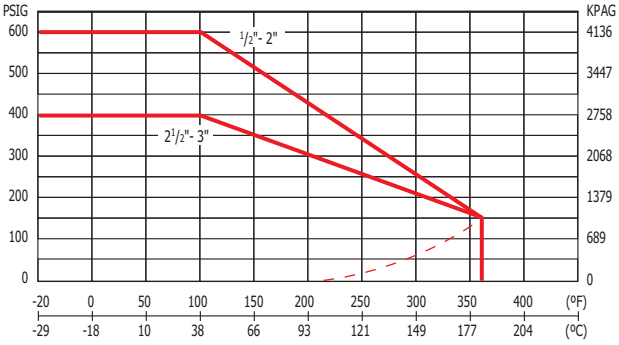


- Cast 2 piece construction
- Full Port
- ANSI B1.20.1 NPT ends
- Blowout-Proof Stem
- Chrome plated ball
- Adjustable Packing Gland
- Class 150 WSP
- 1/2" to 2": 600 WOG
- 21/2" to 3": 400 WOG

BZ-3 PART/MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Lever	Steel ASTM A36.
2	Lever Screw	Steel ASTM A36.
3	Packing Nut	Brass ASTM B124-C37700
4	Stem Packing	PTFE
5	Stem	Brass ASTM B124-C37700
6	Cap	Bronze ASTM B-62 / B30-C83600
7	Seat	PTFE
8	Body	Bronze ASTM B-62 / B30-C83600
9	Ball	Brass ASTM B124 / B283-C37700 / B30-C85700 Chrome plated

BZ-3 DIMENSIONS								
Size	**1/2"**	**3/4"**	**1"**	**1 1/4"**	**1 1/2"**	**2"**	**2 1/2"**	**3"**
A	57.0	67.0	77.0	91.0	103.0	122.0	153.0	179.2
mm/in	2.25	2.64	3.04	3.59	4.06	4.81	6.03	7.06
B	91.5	91.5	126.5	126.5	141.5	141.5	281.3	281
mm/in	3.60	3.60	4.98	4.98	5.57	5.57	11.07	11.07
C	54.0	57.5	65.3	71.0	83.0	91.0	119.3	131
mm/in	2.13	2.26	2.57	2.80	3.27	3.58	4.69	5.15
D	15.0	20.0	25.0	32.0	40.0	50.0	65.0	80.0
mm/in	0.59	0.79	0.98	1.26	1.57	1.97	2.55	3.14
E	0.60	0.80	1.0	2.10	3.7	5.85		
mm/in	0.28	0.37	0.46	0.96	1.68	2.66		

PRESSURE TEMPERATURE RATING



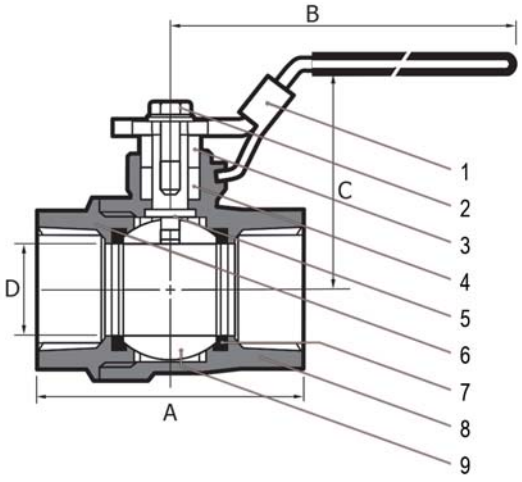
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

BZ Series
Cast Bronze 250 Steam Rated Ball Valves

BZ-3SS-250

5.15



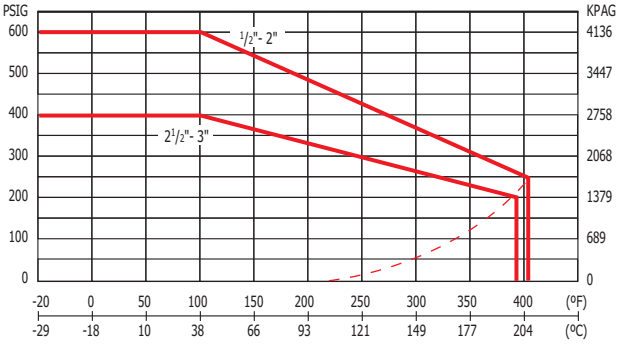


- Cast 2 piece construction
- Full Port
- ANSI B1.20.1 NPT ends
- Blowout-Proof Stem
- **316SS Ball & Stem**
- Adjustable Packing Gland
- Locking Handle
- Steam Rated Seats and Seals
- **250 WSP 600 WOG (1/2 to 2")**
- **200 WSP 400 WOG (2 1/2 to 3")**

BZ-3SS-250 PART/MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Lever	SS AISI type 430
2	Lever Screw	SS AISI type 430
3	Packing Nut	Brass ASTM B124-C37700
4	Stem Packing	Graphoil
5	Stem	SS ASTM A276 type 316
6	Cap	Bronze ASTM B62 / B30-C83600
7	Seat	R-PTFE Graphite-Filled
8	Body	Bronze ASTM B62 / B30-C83600
9	Ball	SS ASTM A276 type 316

BZ-3SS-250 DIMENSIONS								
Size	**1/2"**	**3/4"**	**1"**	**1 1/4"**	**1 1/2"**	**2"**	**2 1/2"**	**3"**
A	57.0	67.0	77.0	91.0	103.0	122.0	153.0	179.2
mm/in	2.25	2.64	3.04	3.58	4.06	4.81	6.03	7.06
B	91.5	91.5	126.5	126.5	141.5	141.5	281.0	281.0
mm/in	3.60	3.60	4.98	4.98	5.57	5.57	11.07	11.07
C	54.0	57.5	65	71.0	83.0	91.0	119.0	131.0
mm/in	2.13	2.26	2.57	2.80	3.27	3.58	4.69	5.16
D	15.0	20.0	25.0	32.0	40.0	50.0	65.0	80.0
mm/in	0.59	0.79	0.98	1.26	1.57	1.97	2.56	3.15

PRESSURE TEMPERATURE RATING



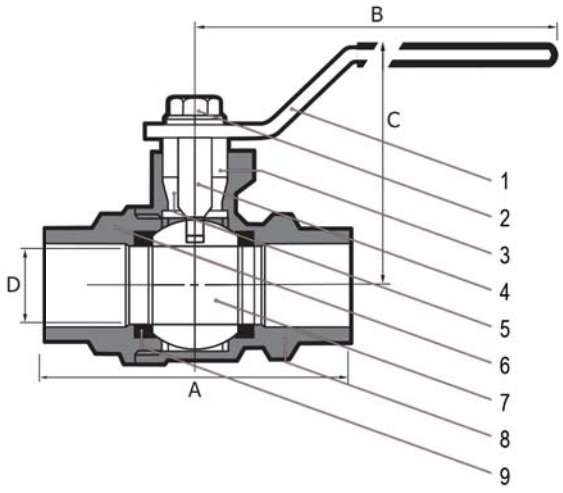
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

BZ Series Cast Bronze Ball Valves

BZ-4

5.16



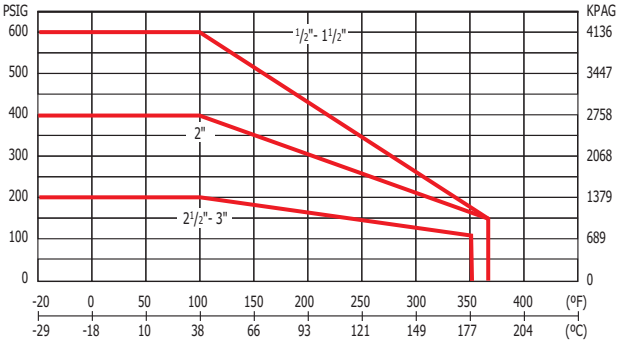


- Cast 2 piece construction
- Full port
- ANSI B16.22 solder ends (CXC)
- Blowout-proof stem
- Chrome plated ball
- Adjustable packing gland
- Class 150, 600 WOG (1/2 to 11/2")
- Class 150, 400 WOG (2")
- Class 125, 200 WOG (2 1/2" to 3")

BZ-4 PART/MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Lever	Steel ASTM A36
2	Lever Screw	Steel ASTM A36
3	Packing Nut	Brass ASTM B124-C37700
4	Stem	Brass ASTM B124-C37700
5	Stem Packing	PTFE
6	Cap	Bronze ASTM B62 / B30-C83600
7	Ball	Brass ASTM B124 / B283-C37700 or B30-C85700 chrome plated
8	Body	Bronze ASTM B62 / B30-C83600
9	Seats	PTFE

BZ-4 DIMENSIONS								
Size	**1/2"**	**3/4"**	**1"**	**1 1/4"**	**1 1/2"**	**2"**	**2 1/2"**	**3"**
A	63.0	80.0	92.0	104.0	121.0	146.0	217	237
mm/in	2.48	3.15	3.63	4.10	4.77	5.75	8.54	9.33
B	91.5	91.5	126.5	126.5	141.5	141.5	281	281
mm/in	3.60	3.60	4.98	4.98	5.57	5.57	11.07	11.07
C	54.0	57.5	65.3	70.8	83.3	91.0	119.3	131.0
mm/in	2.13	2.26	2.57	2.79	3.28	3.58	4.69	5.15
D	15.0	20.0	25.0	32.0	40.0	50.0	65	78
mm/in	0.59	0.79	0.98	1.26	1.57	1.97	2.55	3.07

PRESSURE TEMPERATURE RATING



*NOTES:

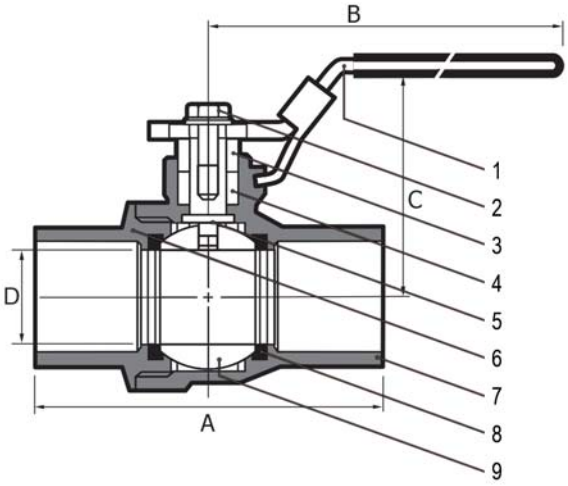
1) The safe working pressure-temperature rating for a solder joint piping system is dependent not only on valve seat rating but also on the limitations of the solder used for joints. Refer to ANSI B16.18 - Table A1 for the Maximum recommended pressure-temperature ratings for solder joints.
2) Exercise caution during installation by applying heat away from the valve body. Excessive direct flame may damage body seats and seals.

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

BZ Series
Cast Bronze, SS Trim, Locking Lever Ball Valves

BZ-4SS



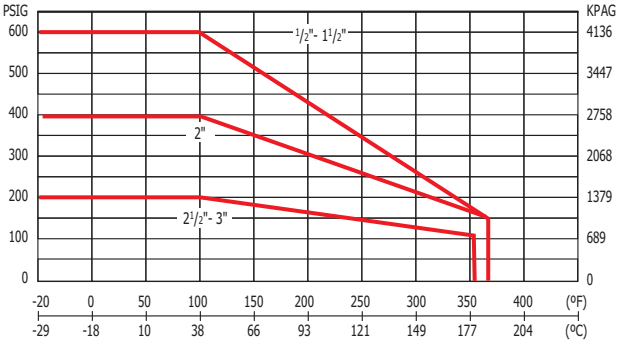


- Cast 2 piece construction
- Full Port
- ANSI B16.18 solder ends (CXC)
- Blowout-Proof Stem
- **316SS Ball & Stem**
- Adjustable Packing Gland
- Locking Handle
- Class 150, 600 WOG (1/2 to 11/2)
- Class 150, 400 WOG (2")
- Class 125, 200 WOG (2 1/2 to 3")

BZ-4SS PART/MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Lever	SS AISI type 430
2	Lever Screw	SS AISI type 430
3	Packing Nut	Brass ASTM B124-C37700
4	Stem Packing	PTFE
5	Stem	SS ASTM A276 type 316
6	Cap	Bronze ASTM B62 / B30-C83600
7	Body	Bronze ASTM B62 / B30-C83600
8	Seat	PTFE
9	Ball	SS ASTM A276 type 316

BZ-4SS DIMENSIONS								
Size	**1/2"**	**3/4"**	**1"**	**1 1/4"**	**1 1/2"**	**2"**	**2 1/2"**	**3"**
A	63	80	92	104	121	146	217	237
mm/in	2.48	3.15	3.62	4.09	4.76	5.75	8.54	9.33
B	96	96	132	132	143	143	285	285
mm/in	3.77	3.77	5.19	5.19	5.62	5.62	11.22	11.22
C	52	56	69	75	89	97	124	135
mm/in	2.04	2.20	2.71	2.95	3.50	3.81	4.88	5.31
D	15.0	20.0	25.0	32.0	40.0	50.0	65	78
mm/in	0.59	0.79	0.98	1.26	1.57	1.97	2.56	3.07

PRESSURE TEMPERATURE RATING



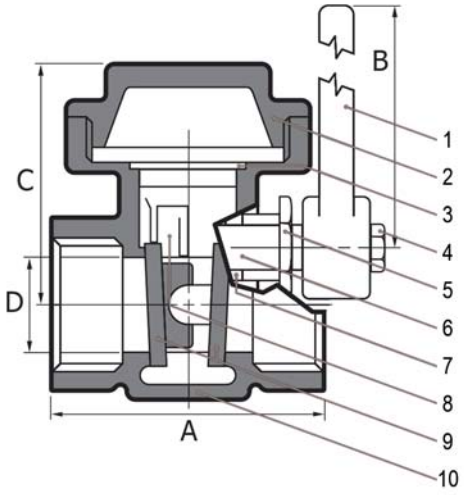
*NOTES:
1) The safe working pressure-temperature rating for a solder joint piping system is dependent not only on valve seat rating but also on the limitations of the solder used for the joints. Refer to ANSI B16.18 Table A1 for the Maximum recommended pressure-temperature ratings for solder joints.
2) Exercise caution during installation by applying heat away from the valve body. Excessive direct flame may damage body seats and seals.

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

Cast Bronze Lever Operated Quick Opening Gate Valves

B-GL



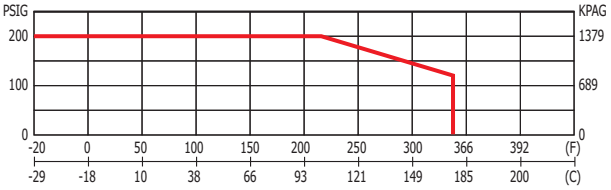


- Cast 2 piece construction
- Large port
- ASME B1.20.1 NPT ends
- Adjustable packing gland
- Class 125 WSP, 200 WOG

B-GL PART/MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Lever	Cast Aluminum ASTM B85
2	Cap	Brass ASTM B283-C37700
3	Cap Gasket	Bronze filled PTFE
4	Screw	Steel ASTM A36
5	Packing Nut	Brass ASTM B124-C37700
6	Stem	Brass ASTM B283-C37700
7	Packing	Carbon-NBR-PTFE composite
8	Disc Arm	Brass ASTM B283-C37700
9	Disc	Brass ASTM B283-C37700
10	Body	Bronze ASTM B62-C83600

B-GL DIMENSIONS										
Size	**3/8"**	**1/2"**	**3/4"**	**1"**	**1 1/4"**	**1 1/2"**	**2"**	**2 1/2"**	**3"**	**4"**
A	44	46	51	57	61	67	77	93	101	115
mm/in	1.73	1.81	2.01	2.24	2.40	2.64	3.03	3.66	3.98	4.53
B	80	80	100	100	120	136	165	205	205	255
mm/in	3.15	3.15	3.94	3.94	4.72	5.35	6.50	8.07	8.07	10.04
C	40	40	48	55	62	68	81	108	121	148
mm/in	1.57	1.57	1.89	2.17	2.44	2.68	3.19	4.25	4.76	5.83
D	15	15	20	25	32	37	47	58	72	91
mm/in	0.59	0.59	0.79	0.98	1.26	1.46	1.85	2.28	2.80	3.62
CV	5.5	10.6	17	28	69	118	185	330	485	770
Weights	0.82	0.82	1.23	1.70	2.20	3.13	4.19	8.2	10.8	17.64
lb/kg	0.37	0.37	0.56	0.77	1.00	1.42	1.90	3.7	4.9	8.0

PRESSURE TEMPERATURE RATING

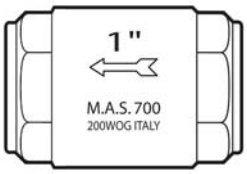


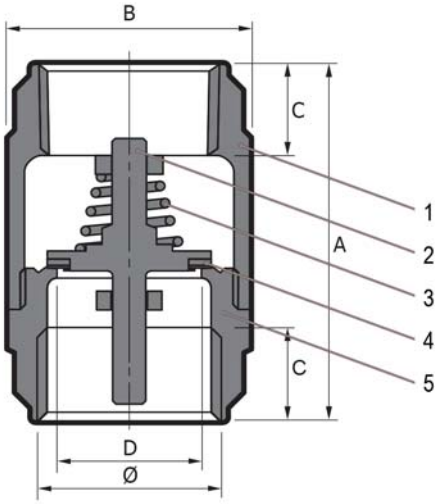
*NOTES:
1) The safe working pressure-temperature rating for a solder joint piping system is dependent not only on valve seat rating but also on the limitations of the solder used for the joints. Refer to ANSI B16.18 Table A1 for the Maximum recommended pressure-temperature ratings for solder joints.
2) Exercise caution during installation by applying heat away from the valve body. Excessive direct flame may damage body seats and seals.

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

Forged Brass In-Line Spring Loaded Check Valves

700





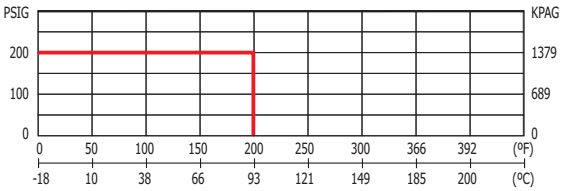


- Forged 2 piece construction
- ANSI B1.20.1 NPT ends
- Center guided piston
- Rubber seated
- 200 WOG

700 PART/MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Body	Forged Brass ASTM B283-C37700
2	Piston	Thermoplastic Hostaform (POM)
3	Spring	316 Stainless Steel
4	Disc	Rubber – NBR 70SH
5	Cap	Forged Brass ASTM B283-C37700

700 DIMENSIONS										
Size	**3/8"**	**1/2"**	**3/4"**	**1"**	**1 1/4"**	**1 1/2"**	**2"**	**2 1/2"**	**3"**	**4"**
A	45	48	53	59	67	70	80	93	102	119
mm/in	1.77	1.89	2.09	2.32	2.64	2.76	3.15	3.66	4.02	4.69
B	27	30	37	45	56	63	79	103	120	155
mm/in	1.06	1.18	1.46	1.77	2.20	2.48	3.11	4.06	4.72	6.10
C	10	11	12	13	14	15	16	18	20	22
mm/in	0.39	0.43	0.47	0.51	0.55	0.59	0.63	0.71	0.79	0.87
D	10	15	20	25	32	40	50	65	80	100
mm/in	0.39	0.59	0.79	0.98	1.26	1.57	1.97	2.56	3.15	3.94
Cv	3.2	4.5	8	12	21	28	47	70	105	185
Weight	0.20	0.25	0.35	0.55	0.80	1.0	1.7	3.5	4.0	7.0
lb/kg	0.09	0.12	0.16	0.25	0.37	0.46	0.78	1.59	1.82	3.2

PRESSURE TEMPERATURE RATING



*NOTES:
1) Suitable for domestic applications and horizontal or vertical upward flow installations.
2) Not recommended for reciprocating pump applications.
3) Contains thermo plastic and rubber components. Confirm suitability with manufacturer on special fluid applications.

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

MAS A SERIES

Manufacturer's Warranty

Limited Three Year Manufacturer's Warranty

Limited Warranty. M.A. Stewart & Sons Ltd. (**"MAS"**) is pleased to advise its customers (**"Customers"**) of MAS brand products (**"Product"** or **"Products"**) that the manufacturer (**"Manufacturer"**) warrants its Products against defects in material and workmanship (**"Defects"**) for a period of three years from the date of delivery by MAS to its Customers (**"Warranty Period"**).

Extent of Remedy. Where MAS is advised in writing of Defects within the Warranty Period, Manufacturer will be deemed to have received notice of the defect and Manufacturer will, at its option, replace or recondition the Product without charge. Where a replacement or reconditioned Product is provided during the Warranty Period, that Product shall be subject to the same warranty for the unexpired portion of the original Warranty Period. This remedy shall constitute the exclusive remedy available to Customers for defective Products.

Limitations. Neither MAS nor Manufacturer shall be liable for any incidental, consequential or other damages, costs or economic losses, including, without limitation, any resulting from labour charges, delays, vandalism, negligence, fouling caused by foreign material, damage from adverse water conditions, chemicals, acts of God, or circumstances that are not controllable or reasonably foreseeable by either Manufacturer or MAS.

Invalidation of Warranty. This warranty shall be invalidated in all circumstances where Manufacturer or MAS, acting reasonably, determines that the Product was subject to any abuse, misuse, or neglect, or any improper application, installation, alteration or modification not authorized in writing by either Manufacturer or MAS. All claims received by MAS beyond the Warranty Period are invalid and shall not be accepted.

Disclaimer. Except for the express written warranty contained herein, neither Manufacturer nor MAS makes any other warranty, condition, guarantee or indemnity, express or implied, statutory or otherwise, regarding the Products **INCLUDING WITHOUT LIMITATION, TO THE EXTENT PERMITTED BY LAW, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE**. All other warranties, conditions guarantees and indemnities regarding any Products are hereby disclaimed, excluded and overridden.

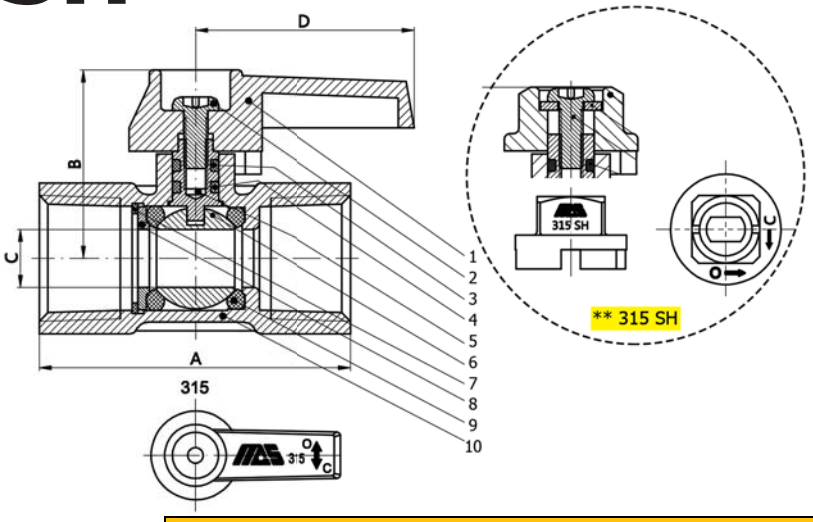
Further Warranty Information. For complete detailed terms of sale and warranty information on all products distributed by MAS, including brands from third party manufacturers distributed by MAS, please visit: http://www.mastewart.com. Please refer to profile page for terms of sales by company.

M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

A Series Forged Brass CSA Gas Ball Valves

315 / 315 SH





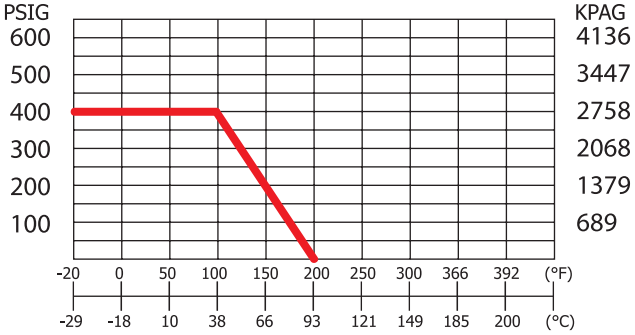
- Forged 1 piece construction
- ASME B1.20.1 NPT Ends
- Smooth, quarter turn operation
- May be used with water 400 PSI
- Seals at high and low pressure
  - ideal for testing installations
- Certified to:ANSI Z21.15 / CSA 9.1 (1/2 PSIG)
  ASME B16.44, CGA-CR91-002 (2 & 5 PSIG)
- -40° to 125°F

- Suitable for use with natural gas, manufactured gas and liquefied petroleum gases (distributed as vapour with or without the admixture of air), or mixtures thereof. Not for use on "Sour Gas".

315 / 315 SH NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle	Aluminum ASTM B85.A03840
2	Screw	Steel ASTM A36 Zinc Plated
3	Stem-O-Ring	HNBR 70SH
4	Stem-O-Ring	FKM
5	Stem	Brass ASTM B124-C37700
6	Ball	Chromium Plated Brass ASTM B124-C37700
7	Retainer Clip	Steel
8	Seat Washer	Brass ASTM B124-C37700
9	Seat O-Ring	HNBR 70SH
10	Body	Brass ASTM B283-C37700
	** Washer	Brass ASTM B124-C37700

315 | 315 SH DIMENSIONS							
Size	**A** mm/in	**B** mm/in	**** B** mm/in	**C** mm/in	**D** mm/in	**Weight** Kg/LBS	**** Weight** Kg/LBS
1/2"	54	33	30	10	38	0.14	0.147
	2.13	1.299	1.18	0.39	1.5	0.304	0.324
3/4"	58.5	35.2	32.2	14	38	0.18	0.187
	2.303	1.386	1.268	0.55	1.5	0.395	0.411

PRESSURE TEMPERATURE RATING



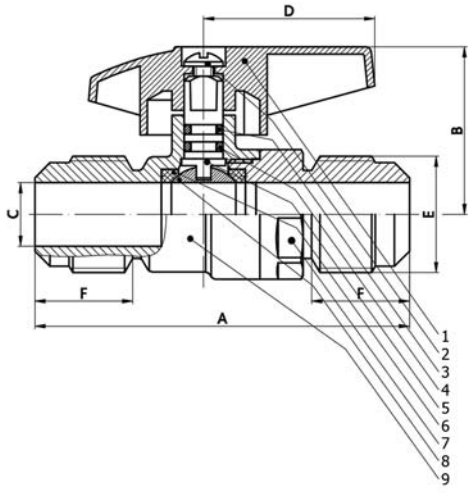
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

A Series
Forged Brass CSA
Gas Ball Valves

326

C US





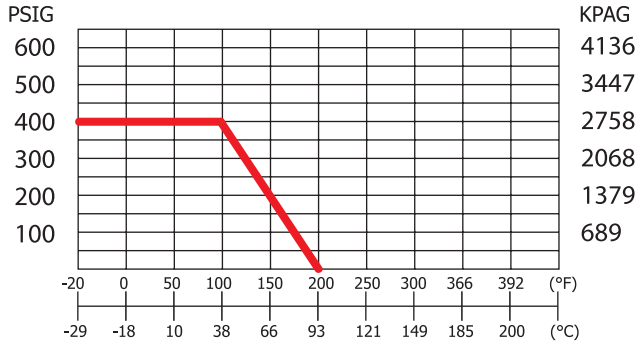
- Forged 2 piece construction
- Flare x Flare
- Smooth, quarter turn operation
- May be used with water 400 PSI
- Seals at high and low pressure - ideal for testing installations
- Certified to:ANSI Z21.15, CSA 9.1 (1/2 PSIG) ASME B16.44, CGA CR91-002 (5 PSIG)
- -40° to 125°F

- Suitable for use with natural gas, manufactured gas and liquefied petroleum gases (distributed as vapour with or without the admixture of air), or mixtures thereof. Not for use on "Sour Gas".

326 NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle	Aluminum ASTM B85-A03840
2	Screw	Steel ASTM A36 Zinc Plated
3	Stem-O-Ring	HNBR 70SH
4	Stem-O-Ring	FKM
5	Stem	Brass ASTM B124-C37700
6	Seats	PTFE
7	Cap	Brass ASTM B283-C37700
8	Ball	Chromium Plated Brass ASTM B124-C37700
9	Body	Brass ASTM B283-C37700

326 DIMENSIONS							
Size	**A** mm/in	**B** mm/in	**C** mm/in	**D** mm/in	**E** mm/in	**F** mm/in	**Weight** Kg/LBS
3/8"	62	31.8	7.1	35	5/8-18 UNF	14	0.111
	2.44	1.25	0.28	1.38		0.55	0.244
1/2"	69.3	34	10	35	3/4-16 UNF	17	0.150
	2.73	1.34	0.4	1.38		0.67	0.33
5/8"	76.5	36.5	12.7	35	7/8-14 UNF	16.5	0.217
	3.01	1.44	0.50	1.38		0.65	0.48

PRESSURE TEMPERATURE RATING



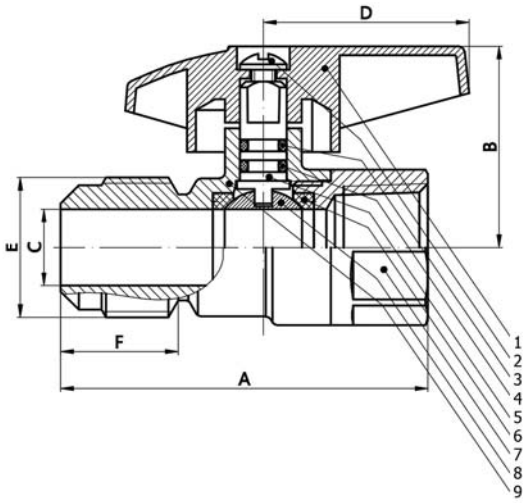
M. A. Stewart & Sons Ltd.
VALVES AND FITTINGS

A Series
Forged Brass CSA
Gas Ball Valves

327

6.3





- Forged 2 piece construction
- ASME B1.20.1 NPT end x Flare
- Smooth, quarter turn operation
- May be used with water 400 PSI
- Seals at high and low pressure - ideal for testing installations
- Certified to: ANSI Z21.15, CSA 9.1 (1/2 PSIG) ASME-B16.44, CGA CR91-002 (5 PSIG)
- -40° to 125°F

- Suitable for use with natural gas, manufactured gas and liquefied petroleum gases (distributed as vapour with or without the admixture of air), or mixtures thereof. Not for use on "Sour Gas".

327 NAME / MATERIAL		
NO.	**PART NAME**	**MATERIAL**
1	Handle	Aluminum ASTM B85-A03840
2	Screw	Steel ASTM A36 Zinc Plated
3	Stem-O-Ring	HNBR 70SH
4	Stem-O-Ring	FKM
5	Stem	Brass ASTM B124-C37700
6	Seats	PTFE
7	Cap	Brass ASTM B283-C37700
8	Ball	Chromium Plated Brass ASTM B124-C37700
9	Body	Brass ASTM B283-C37700

327 DIMENSIONS							
Size	**A** mm/in	**B** mm/in	**C** mm/in	**D** mm/in	**E** mm/in	**F** mm/in	**Weight** Kg/LBS
1/2" x 3/8"	56	33.5	7.1	35	5/8-18 UNF	14	0.125
	2.2	1.32	0.28	1.38		0.55	0.28
1/2"	59.5	34	10	35	3/4-16 UNF	17	0.135
	2.34	1.34	0.39	1.38		0.67	0.3
3/4"	69.5	36.5	13	35	15/16-16UN Gas Appliance	20	0.218
	2.74	1.44	0.51	1.38		0.79	0.48

PRESSURE TEMPERATURE RATING

