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CRANE SUPPLY - Brass Ball Valves

2020

www.cranesupply.com

Key Features and Index

CRANE Supply Ball Valves Key Features:

- ❶ Brass, Lead-Free Brass
- ❷ 100% Factory Testing for Quality Assurance
- ❸ Fully-Rated and Certified



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Overview

APPLICATIONS

CRANE ball valves have gained wide acceptance in industrial segments for their accurate machining and strict testing procedures ensuring that quality is built into every valve. CRANE® ball valves are specified for service in chemical plants, petroleum refineries, pulp and paper mills, and industrial construction projects.

BODY

CRANE offers two-piece body style design available in brass (600# CWP). Two-piece valves offer a larger port opening, equivalent to other competitive options.

CRANE Offers:

Brass valves	Threaded to 4"
2-piece Brass valves	Soldered to 3"

STEM

Stems are inserted from within the body to provide a pressure- safe design (blowout proof).

All CRANE brass ball valves are furnished with stem seals of PTFE to assure a long lasting, positive seal.

Most valves have gland nuts which may be adjusted for stem seal tightness.

SEAT

Tight shutoff is achieved with use of PTFE

HANDLE

Handles on threaded and solder end valves are zinc-plated carbon steel, covered with a protective plastic sleeve. Handles are firmly attached to the stem with jam nuts.

TESTING

Each valve is individually air-tested to ensure the double-block qualities of the seals and to test the integrity of the pressure- containing parts.

WEIGHTS AND DIMENSIONS

Published weights and dimensions are for estimating purposes only and are subject to change without notice. It is our intent to maintain basic dimensional requirements of acceptable standards.

MATERIALS

The standard valve materials for ball valves are brass. All materials for ball valves conform to the specifications set by the American Society for Testing and Materials. Changes in materials may be made without notice.

Figure Number System

Size	Body Style	Ends	Options
¼" - 4"	F92 = 2-pc. Forged, Full Port LF92 = No Lead AB 1953 Approved Material	02 = Threaded 22 = Solder Joint	Lever LD = Locking Device S = Stainless steel ball SD = Cap & Chain

Use this figure number system when ordering ball valves to indicate specific features desired. Not all combinations are available.

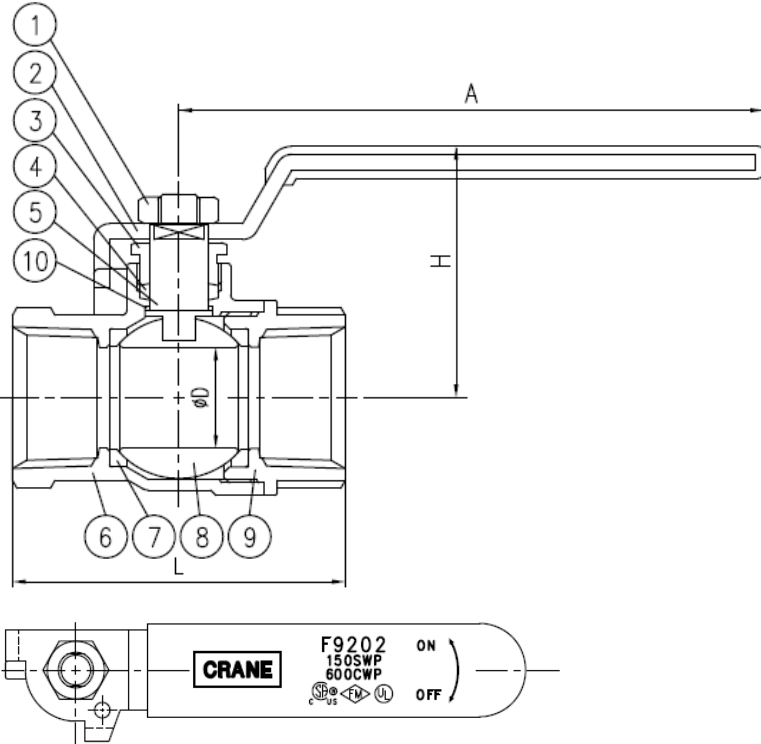
QUALITY MANAGEMENT

CRANE is committed to a philosophy of total quality management. It begins with design in compliance with pertinent MSS and ASME Standards. Continuous improvement is applied in a methodical process to improve materials and services to meet or exceed customer needs.

600 CWP • Full Port • Threaded Ends

F9202

Forged Brass, 2-Piece Body, Meets MSS SP-110, CSA/UL/FM/ NSF 61 Approval (1/2" - 2" only)



Approvals:

UL Approved

- YSDT (LP-Gas Shut-off valves)
- YRBX (Flammable Liquid Shut-off valves)
- MHKZ (Manual valves)

CSA Approved

- CLASS 3371 94 - Manually Operated Metallic for Use in Piping Systems Certified to US Standards
- CLASS 3371 92 - Manually Operated Metallic for Use in House Piping Systems -Certified to US Standards
- CLASS 3371 88 - General Use - Certified to US Standards
- CLASS 3371 12 - Manually Operated for Use on Piping
- CLASS 3371 10 - Lever Operated Non-Lubricated Shut-off
- CLASS 3371 08 - General Use

NSF Approved by Truesdail Lab

- NSF/ANSI/CAN 61-2018

If low lead required, please refer to LF9202

Materials of Construction

No.	Description	Material
1	Nut	S10C
2	Handle	SS400
3	Stem Gland Screw	C3604B
4	Stem Packing	PTFE
5	Stem	C3604B
6	Body	C3771B (1/4" - 2") CAC203 (2 1/2" - 4")
7	Seat	PTFE
8	Ball	C3604B C3771B
9	End Plug	C3771B
10	Thrust Washer	PTFE (2" - 4")

Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

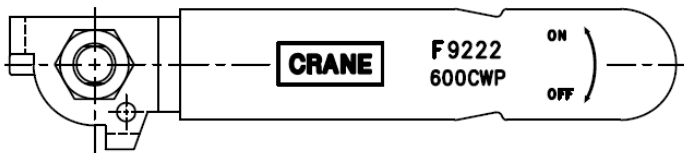
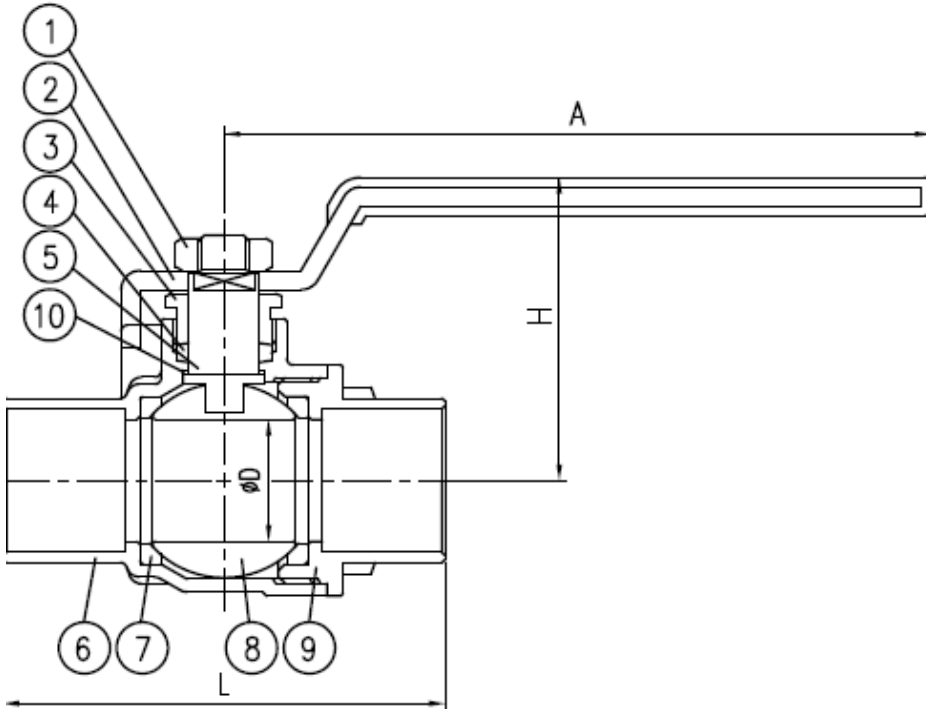
Valve Size	Dimensions				Wt.
	A	D	H	L	
1/4	3.15	0.35	1.26	1.69	0.26
	(80)	(9)	(32)	(43)	(0.12)
3/8	3.15	0.39	1.46	1.81	0.31
	(80)	(10)	(37)	(46)	(0.14)
1/2	3.15	0.50	1.50	2.13	0.40
	(80)	(13)	(38)	(54)	(0.18)
3/4	4.33	0.75	1.58	2.48	0.75
	(110)	(19)	(47)	(63)	(0.34)
1	4.33	0.98	2.05	2.99	1.06
	(110)	(25)	(52)	(76)	(0.48)
1 1/4	5.12	1.26	2.36	3.35	1.63
	(130)	(32)	(60)	(85)	(0.74)
1 1/2	5.12	1.50	2.56	3.62	2.01
	(130)	(38)	(65)	(92)	(0.91)
2	7.87	1.97	3.11	4.25	3.84
	(200)	(50)	(79)	(108)	(1.74)
2 1/2	7.87	2.48	3.50	5.16	6.66
	(200)	(63)	(89)	(131)	(3.02)
3	7.87	2.95	3.86	5.91	9.15
	(200)	(75)	(98)	(150)	(4.15)
4*	7.87	2.95	3.86	6.26	11.42
	(200)	(75)	(98)	(159)	(5.18)

* Reduced port

600 CWP • Full Port • Solder Ends

F9222

Forged Brass, 2-Piece Body



Approvals:

NSF Approved by Truesdail Lab

• NSF/ANSI/CAN 61-2018

If low lead required, please refer to LF9222

Materials of Construction

No.	Description	Material
1	Nut	S10C
2	Handle	SS400
3	Stem Gland Screw	C3604B
4	Stem Packing	PTFE
5	Stem	C3604B
6	Body	C3771B (3/8" - 2") CAC203 (2 1/2" - 3")
7	Seat	PTFE
8	Ball	C3604B C3771B
9	End Plug	C3771B
10	Thrust Washer	PTFE (2" - 4")

Valves are rated to 600CWP only and are not intended for use on steam service.

Dimensions and Weights

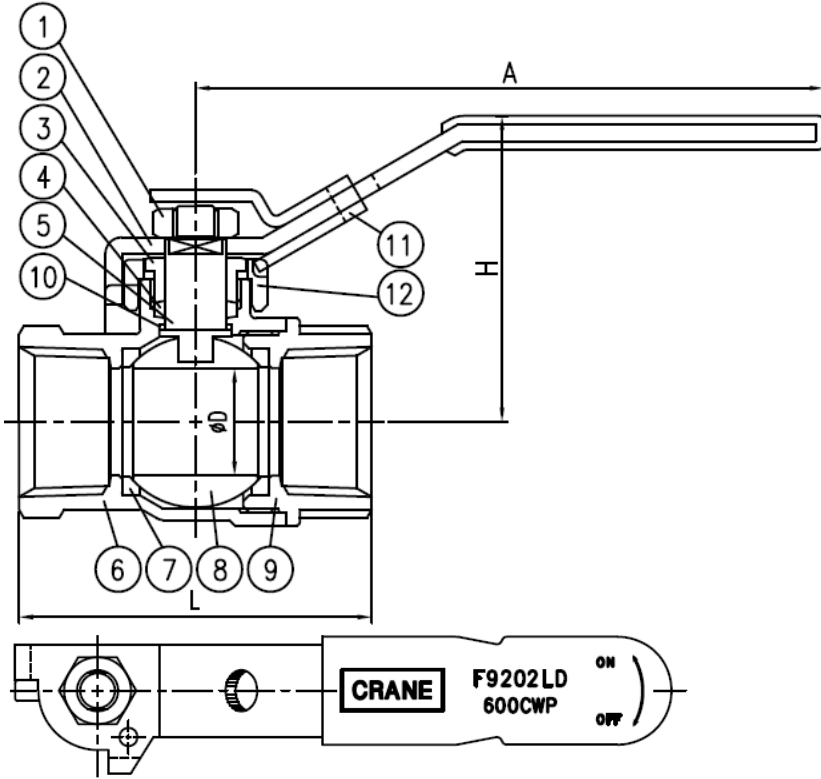
Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions				Wt.
	A	D	H	L	
3/8	3.15	0.39	1.46	1.61	0.31
	(80)	(10)	(37)	(41)	(0.14)
1/2	3.15	0.50	1.50	1.93	0.35
	(80)	(12.7)	(38)	(49)	(0.16)
3/4	4.33	0.75	1.58	2.72	0.70
	(110)	(19)	(47)	(69)	(0.32)
1	4.33	0.98	2.05	3.31	0.99
	(110)	(25)	(52)	(84)	(0.45)
1 1/4	5.12	1.26	2.36	3.78	1.54
	(130)	(32)	(60)	(96)	(0.70)
1 1/2	5.12	1.50	2.56	4.29	1.94
	(130)	(38)	(65)	(109)	(0.88)
2	7.87	1.97	3.11	5.35	3.90
	(200)	(50)	(79)	(136)	(1.77)
2 1/2	7.87	2.48	3.50	6.18	5.88
	(200)	(63)	(89)	(157)	(2.67)
3	7.87	2.95	3.86	7.09	8.88
	(200)	(75)	(98)	(180)	(4.03)

600 CWP • Full Port • Threaded Ends • Locking device

F9202LD

Forged Brass, 2-Piece Body, Meets MSS SP-110, CSA/UL/FM Approval (1/2" - 2" only)



Approvals:

UL Approved

- YSDT (LP-Gas Shut-off valves)
- YRBX (Flammable Liquid Shut-off valves)
- MHKZ (Manual valves)

CSA Approved

- CLASS 3371 94 - Manually Operated Metallic for Use in Piping Systems Certified to US Standards
- CLASS 3371 92 - Manually Operated Metallic for Use in House Piping Systems -Certified to US Standards
- CLASS 3371 88 - General Use - Certified to US Standards
- CLASS 3371 12 - Manually Operated for Use on Piping
- CLASS 3371 10 - Lever Operated Non-Lubricated Shut-off
- CLASS 3371 08 - General Use

NSF Approved by Truesdail Lab

- NSF/ANSI/CAN 61-2018

If low lead required, please refer to LF9202

Materials of Construction

No.	Description	Material
1	Nut	S10C
2	Handle	SS400
3	Stem Gland Screw	C3604B
4	Stem Packing	PTFE
5	Stem	C3604B
6	Body	C3771B (1/4" - 2") CAC203 (2 1/2" -4")
7	Seat	PTFE
8	Ball	C3604B C3771B
9	End Plug	C3771B
10	Thrust Washer	PTFE (2" - 4")
11	Latch Lock	SS400
12	Stop Washer	ZDC1

Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

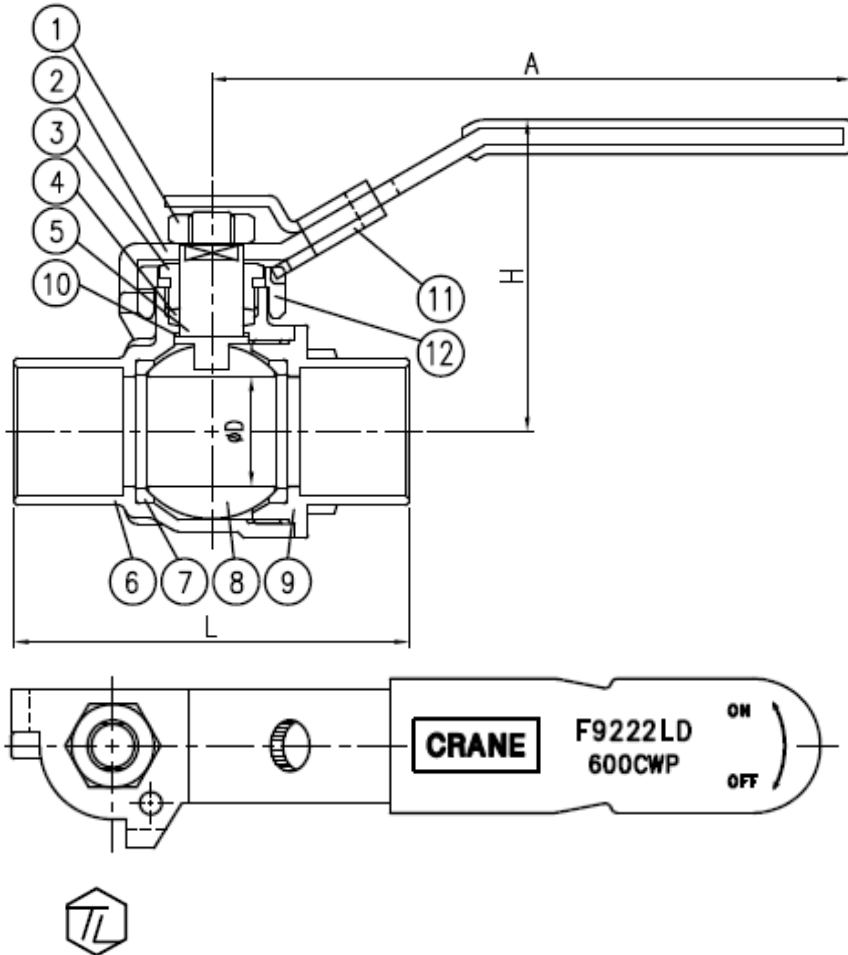
Valve Size	Dimensions				Wt.
	A	D	H	L	
1/4	3.27	0.35	1.65	1.69	0.31
	(83)	(9)	(42)	(43)	(0.14)
3/8	3.27	0.39	1.69	1.81	0.35
	(83)	(10)	(43)	(46)	(0.16)
1/2	3.27	0.50	1.73	2.13	0.44
	(83)	(12.7)	(44)	(54)	(0.20)
3/4	4.41	0.75	2.13	2.48	0.81
	(112)	(19)	(54)	(63)	(0.37)
1	4.41	0.98	2.32	2.99	1.12
	(112)	(25)	(59)	(76)	(0.51)
1 1/4	5.24	1.26	2.68	3.35	1.72
	(133)	(32)	(68)	(85)	(0.78)
1 1/2	5.24	1.50	2.87	3.62	2.09
	(133)	(38)	(73)	(92)	(0.95)
2	7.99	1.97	3.58	4.25	3.96
	(203)	(50)	(91)	(108)	(1.80)
2 1/2	7.99	2.48	3.98	5.16	6.78
	(203)	(63)	(101)	(131)	(3.08)
3	7.99	2.95	4.33	5.91	9.27
	(203)	(75)	(110)	(150)	(4.21)
4*	7.99	2.95	4.33	6.26	11.54
	(203)	(75)	(110)	(159)	(5.24)

* Reduced port

600 CWP • Full Port • Solder Ends • Locking device

F9222LD

Forged Brass, 2-Piece Body, Meets MSS SP-110,



Approvals:

NSF Approved by Truesdail Lab

- NSF/ANSI/CAN 61-2018

If low lead required, please refer to LF9222

Materials of Construction

No.	Description	Material
1	Nut	S10C
2	Handle	SS400
3	Stem Gland Screw	C3604B
4	Stem Packing	PTFE
5	Stem	C3604B
6	Body	C3771B (1/4" - 2") CAC203 (2 1/2" - 4")
7	Seat	PTFE
8	Ball	C3604B C3771B
9	End Plug	C3771B
10	Thrust Washer	PTFE (2" - 4")
11	Latch Lock	SS400
12	Stop Washer	ZDC1

Valves are rated to 600CWP only and are not intended for use on steam service.

Dimensions and Weights

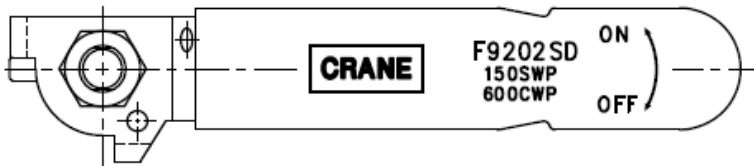
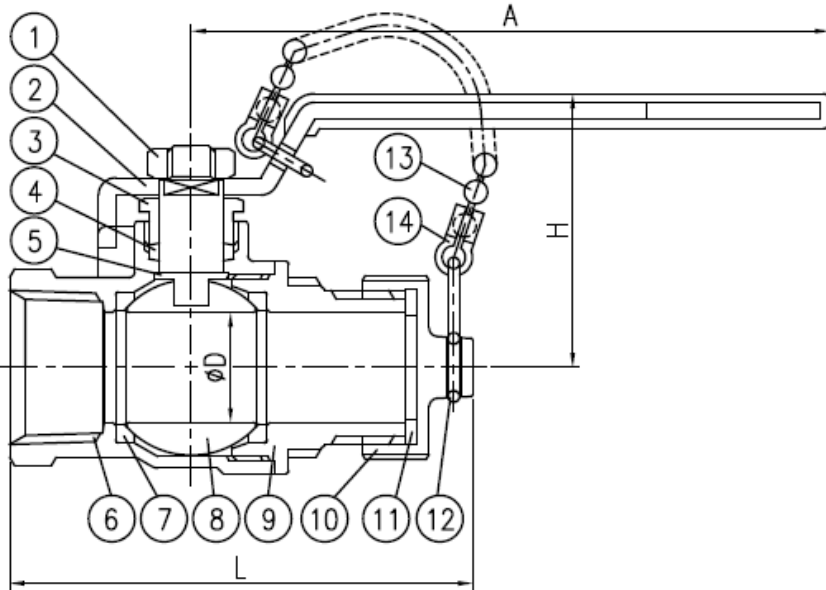
Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions				Wt.
	A	D	H	L	
3/8	3.27	0.39	1.69	1.61	0.31
	(83)	(10)	(43)	(41)	(0.14)
1/2	3.27	0.50	1.73	1.93	0.35
	(83)	(12.7)	(44)	(49)	(0.16)
3/4	4.41	0.75	2.13	2.72	0.70
	(112)	(19)	(54)	(69)	(0.32)
1	4.41	0.98	2.32	3.31	0.99
	(112)	(25)	(59)	(84)	(0.45)
1 1/4	5.24	1.26	2.68	3.78	1.54
	(133)	(32)	(68)	(96)	(0.70)
1 1/2	5.24	1.50	2.87	4.29	1.94
	(133)	(38)	(73)	(109)	(0.88)
2	7.99	1.97	3.58	5.35	3.90
	(203)	(50)	(91)	(136)	(1.77)
2 1/2	7.99	2.48	3.98	6.18	5.88
	(203)	(63)	(101)	(157)	(2.67)
3	7.99	2.95	4.33	7.09	8.88
	(203)	(75)	(110)	(180)	(4.03)

600 CWP • Full Port • Threaded Ends • Cap and Chain

F9202SD

Forged Brass, 2-Piece Body, Cap and Chain, Meets MSS SP-110



Approvals:

NSF Approved by Truesdail Lab

• NSF/ANSI/CAN 61-2018

If low lead required, please refer to LF9202

Materials of Construction

No.	Description	Material
1	Nut	S10C
2	Handle	SS400
3	Stem Gland Screw	C3604B
4	Stem Packing	PTFE
5	Stem	C3604B
6	Body	C3771B
7	Seat	PTFE
8	Ball	C3604B
9	End Plug	C3771B
10	Cap Nut	C3771B
11	Nut Packing	NBR
12	Ring	SUS304
13	Chain	BRASS
14	Plate	SUS430

Dimensions and Weights

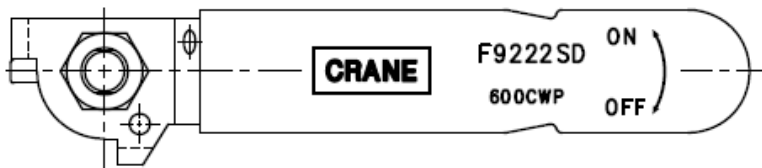
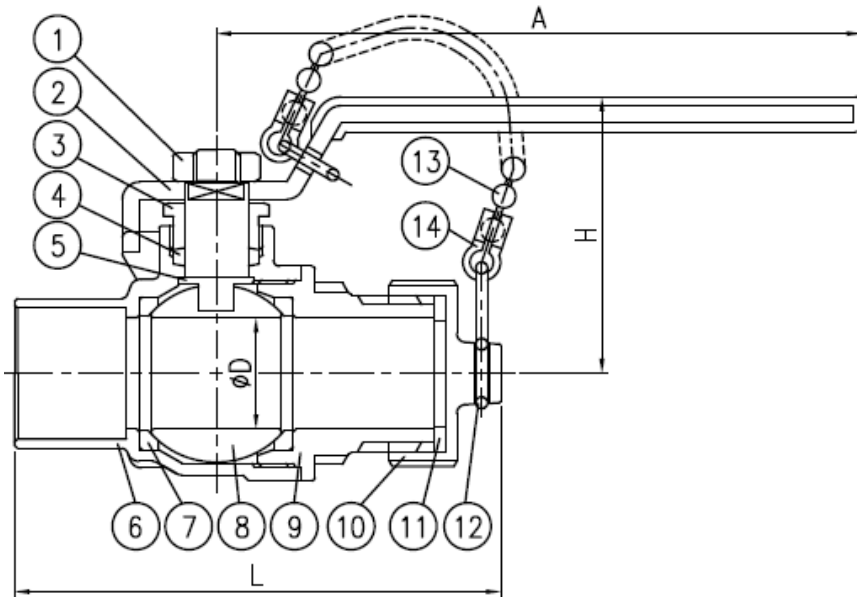
Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions				Wt.
	A	D	H	L	
½	3.15	0.50	1.50	2.83	0.55
	(80)	(12.7)	(38)	(72)	(0.25)
¾	4.33	0.75	1.85	3.15	0.95
	(110)	(19)	(47)	(80)	(0.43)

600 CWP • Full Port • Solder Ends • Cap and Chain

F9222SD

Forged Brass, 2-Piece Body, Cap and Chain, Meets MSS SP-110



Approvals:

NSF Approved by Truesdail Lab

•NSF/ANSI/CAN 61-2018

If low lead required, please refer to LF9222

Materials of Construction

No.	Description	Material
1	Nut	S10C
2	Handle	SS400
3	Stem Gland Screw	C3604B
4	Stem Packing	PTFE
5	Stem	C3604B
6	Body	C3771B
7	Seat	PTFE
8	Ball	C3604B
9	End Plug	C3771B
10	Cap Nut	C3771B
11	Nut Packing	NBR
12	Ring	SUS304
13	Chain	BRASS
14	Plate	SUS430

Valves are rated to 600CWP only and are not intended for use on steam service.

Dimensions and Weights

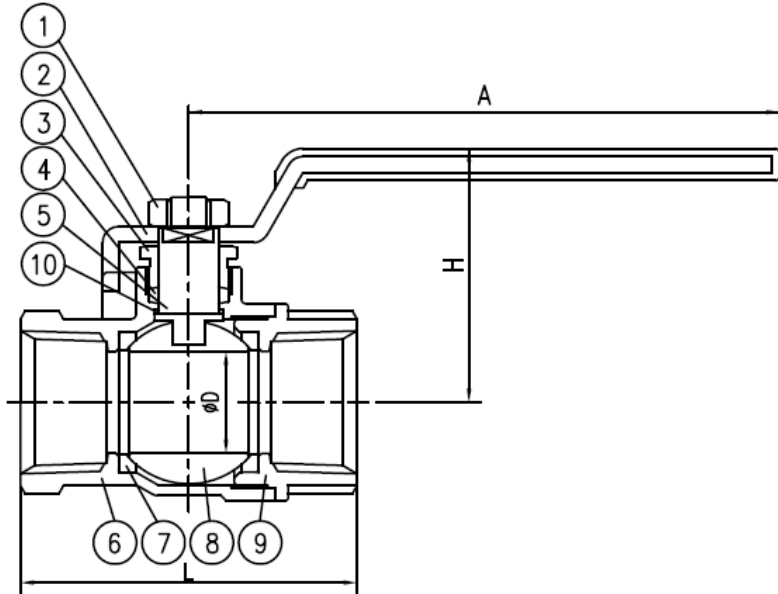
Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions				Wt.
	A	D	H	L	
½	3.15	0.50	1.50	2.83	0.55
	(80)	(12.7)	(38)	(72)	(0.25)
¾	4.33	0.75	1.85	3.15	0.95
	(110)	(19)	(47)	(80)	(0.43)

600 CWP • Full Port • Threaded Ends • Stainless Steel Ball

F9202S

Forged Brass, 2-Piece Body, SS Ball, Meets MSS SP-110



Approvals:

UL Approved

- YSDT (LP-Gas Shut-off valves)
- YRBX (Flammable Liquid Shut-off valves)
- MHKZ (Manual valves)

CSA Approved

- CLASS 3371 94 - Manually Operated Metallic for Use in Piping Systems Certified to US Standards
- CLASS 3371 92 - Manually Operated Metallic for Use in House Piping Systems -Certified to US Standards
- CLASS 3371 88 - General Use - Certified to US Standards
- CLASS 3371 12 - Manually Operated for Use on Piping
- CLASS 3371 10 - Lever Operated Non-Lubricated Shut-off
- CLASS 3371 08 - General Use

NSF Approved by Truesdail Lab

- NSF/ANSI/CAN 61-2018

If low lead required, please refer to LF9202

Materials of Construction

No.	Description	Material
1	Nut	S10C
2	Handle	SS400
3	Stem Gland Screw	C3604B
4	Stem Packing	PTFE
5	Stem	SUS304
6	Body	C3771B (1/4" - 2") CAC203 (2 1/2" -4")
7	Seat	PTFE
8	Ball	SUS304
9	End Plug	C3771B
10	Thrust Washer	PTFE (2" -4")

Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

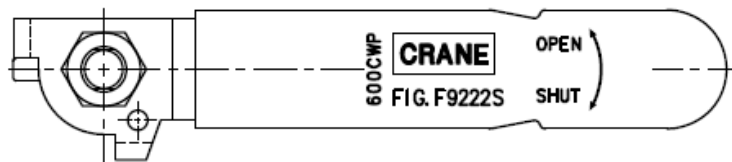
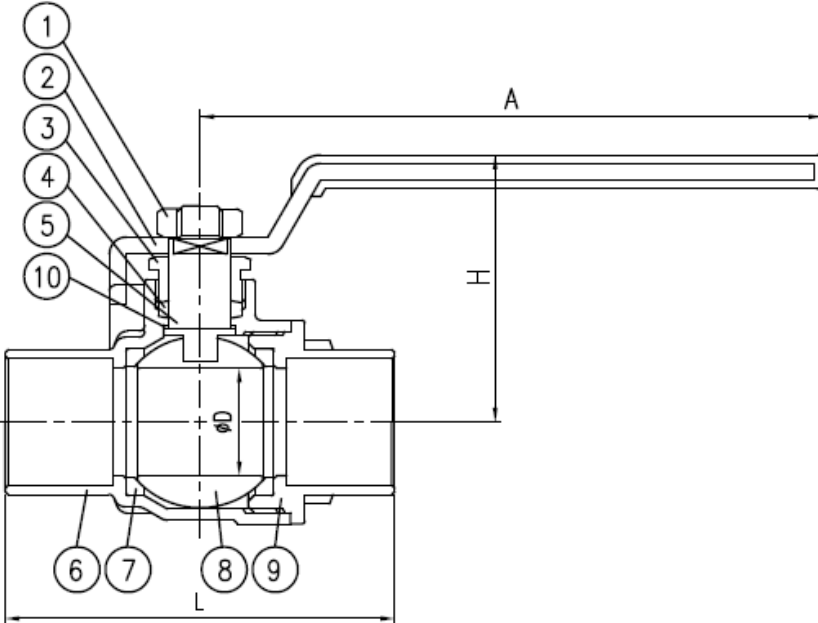
Valve Size	Dimensions				Wt.
	A	D	H	L	
1/4	3.15	0.35	1.26	1.69	0.26
	(80)	(9)	(32)	(43)	(0.12)
3/8	3.15	0.39	1.46	1.81	0.29
	(80)	(10)	(37)	(46)	(0.13)
1/2	3.15	0.50	1.50	2.13	0.37
	(80)	(12.7)	(38)	(54)	(0.17)
3/4	4.33	0.75	1.58	2.48	0.73
	(110)	(19)	(47)	(63)	(0.33)
1	4.33	0.98	2.05	2.99	1.17
	(110)	(25)	(52)	(76)	(0.53)
1 1/4	5.12	1.26	2.36	3.35	1.94
	(130)	(32)	(60)	(85)	(0.88)
1 1/2	5.12	1.50	2.56	3.62	2.51
	(130)	(38)	(65)	(92)	(1.14)
2	7.87	1.97	3.11	4.25	5.07
	(200)	(50)	(79)	(108)	(2.30)
2 1/2	7.87	2.48	3.50	5.16	9.16
	(200)	(63)	(89)	(131)	(3.08)
3	7.87	2.95	3.86	5.91	12.89
	(200)	(75)	(98)	(150)	(5.85)
4*	7.87	2.95	3.86	6.26	17.64
	(200)	(75)	(98)	(159)	(8.01)

* Reduced port

600 CWP • Full Port • Solder Ends • Stainless Steel Ball

F9222S

Forged Brass, 2-Piece Body, SS Ball, Meets MSS SP-110



Approvals:

NSF Approved by Truesdail Lab

- NSF/ANSI/CAN 61-2018

If low lead required, please refer to LF9222

Materials of Construction

No.	Description	Material
1	Nut	S10C
2	Handle	SS400
3	Stem Gland Screw	C3604B
4	Stem Packing	PTFE
5	Stem	SUS304
6	Body	C3771B (1/4" - 2") CAC203 (2 1/2" - 4")
7	Seat	PTFE
8	Ball	SUS304
9	End Plug	C3771B
10	Thrust Washer	PTFE (2" - 3")

Valves are rated to 600CWP only and are not intended for use on steam service.

Dimensions and Weights

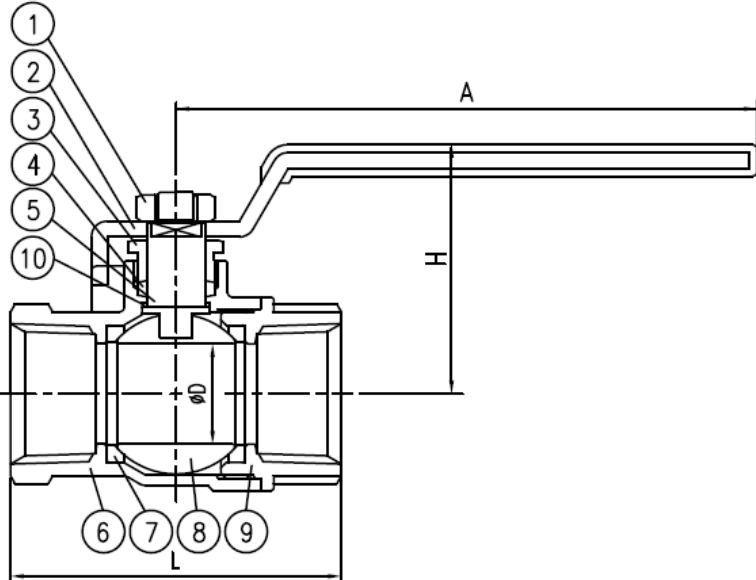
Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions				Wt.
	A	D	H	L	
3/8	3.15	0.39	1.46	1.61	0.29
	(80)	(10)	(37)	(41)	(0.13)
1/2	3.15	0.50	1.50	1.93	0.29
	(80)	(12.7)	(38)	(49)	(0.13)
3/4	4.33	0.75	1.58	2.72	0.64
	(110)	(19)	(47)	(69)	(0.29)
1	4.33	0.98	2.05	3.31	1.06
	(110)	(25)	(52)	(84)	(0.48)
1 1/4	5.12	1.26	2.36	3.78	1.74
	(130)	(32)	(60)	(96)	(0.79)
1 1/2	5.12	1.50	2.56	4.29	2.36
	(130)	(38)	(65)	(109)	(1.07)
2	7.87	1.97	3.11	5.35	4.98
	(200)	(50)	(79)	(136)	(2.26)
2 1/2	7.87	2.48	3.50	6.18	8.24
	(200)	(63)	(89)	(157)	(3.74)
3	7.87	2.95	3.86	7.09	12.49
	(200)	(75)	(98)	(180)	(5.67)

600 CWP • Full Port • Threaded Ends • Lead Free

LF9202

Forged Brass, 2-Piece Body, Meets MSS SP-110



Approvals:

UL Approved

- YSDT (LP-Gas Shut-off valves)
- YRBX (Flammable Liquid Shut-off valves)
- MHKZ (Manual valves)

CSA Approved

- CLASS 3371 94 - Manually Operated Metallic for Use in Piping Systems Certified to US Standards
- CLASS 3371 92 - Manually Operated Metallic for Use in House Piping Systems -Certified to US Standards
- CLASS 3371 88 - General Use - Certified to US Standards
- CLASS 3371 12 - Manually Operated for Use on Piping
- CLASS 3371 10 - Lever Operated Non-Lubricated Shut-off
- CLASS 3371 08 - General Use

NSF Approved by Truesdail Lab

- NSF/ANSI/CAN 61-2018
- NSF/ANSI 372-2016

Materials of Construction

No.	Description	Material
1	Nut	S10C
2	Handle	SS400
3	Stem Gland Screw	C3604B
4	Stem Packing	PTFE
5	Stem	C3604B
6	Body	C46400
7	Seat	PTFE
8	Ball 1/4" - 3/4" - Vented ball 1" - 4" - Hollow ball	C46400
9	End Plug	C46400
10	Thrust Washer	PTFE (2" -4")

Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

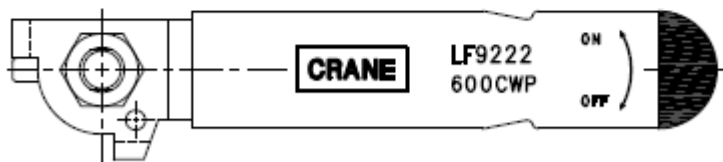
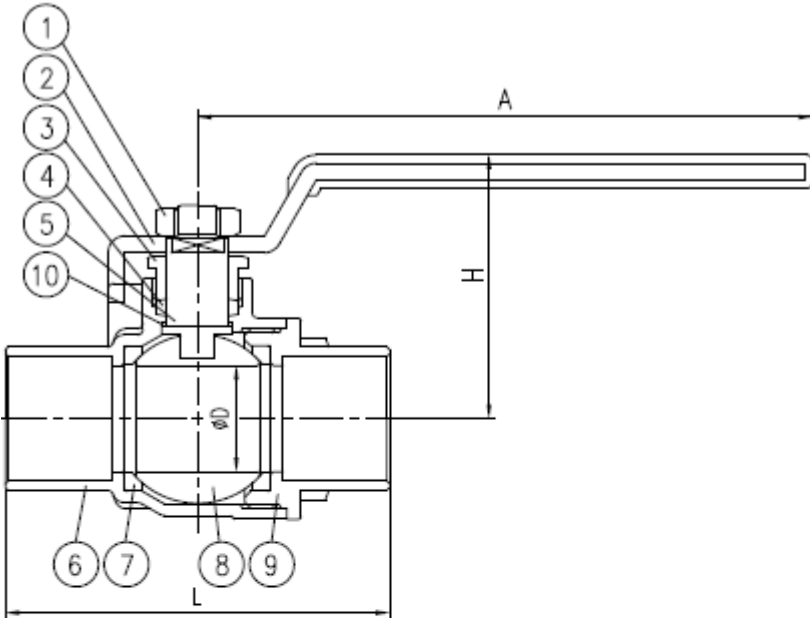
Valve Size	Dimensions				Wt.
	A	D	H	L	
1/4	3.15	0.35	1.26	1.69	0.26
	(80)	(9)	(32)	(43)	(0.12)
3/8	3.15	0.39	1.46	1.81	0.31
	(80)	(10)	(37)	(46)	(0.14)
1/2	3.15	0.50	1.50	2.13	0.40
	(80)	(13)	(38)	(54)	(0.18)
3/4	4.33	0.75	1.58	2.48	0.75
	(110)	(19)	(47)	(63)	(0.34)
1	4.33	0.98	2.05	2.99	1.06
	(110)	(25)	(52)	(76)	(0.48)
1 1/4	5.12	1.26	2.36	3.35	1.63
	(130)	(32)	(60)	(85)	(0.74)
1 1/2	5.12	1.50	2.56	3.62	2.01
	(130)	(38)	(65)	(92)	(0.91)
2	7.87	1.97	3.11	4.25	3.84
	(200)	(50)	(79)	(108)	(1.74)
2 1/2	7.87	2.48	3.50	5.16	6.66
	(200)	(63)	(89)	(131)	(3.02)
3	7.87	2.95	3.86	5.91	9.15
	(200)	(75)	(98)	(150)	(4.15)
4*	7.87	2.95	3.86	6.26	11.42
	(200)	(75)	(98)	(159)	(5.18)

* Reduced port

600 CWP • Full Port • Solder Ends • Lead Free

LF9222

Forged Brass, 2-Piece Body, Meets MSS SP-110



Approvals:

NSF Approved by Truesdail Lab

- NSF/ANSI/CAN 61-2018
- NSF/ANSI 372-2016

Materials of Construction

No.	Description	Material
1	Nut	S10C
2	Handle	SS400
3	Stem Gland Screw	C3604B
4	Stem Packing	PTFE
5	Stem	C3604B
6	Body	C46400
7	Seat	PTFE
8	Ball ½" - ¾" - Vented ball 1" - 3" - Hollow ball	C46400
9	End Plug	C46400
10	Thrust Washer	PTFE (2" -3")

Valves are rated to 600CWP only and are not intended for use on steam service.

Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions				Wt.
	A	D	H	L	
¾	3.15	0.39	1.46	1.61	0.31
	(80)	(10)	(37)	(41)	(0.14)
½	3.15	0.50	1.50	1.93	0.35
	(80)	(12.7)	(38)	(49)	(0.16)
¾	4.33	0.75	1.58	2.72	0.70
	(110)	(19)	(47)	(69)	(0.32)
1	4.33	0.98	2.05	3.31	0.99
	(110)	(25)	(52)	(84)	(0.45)
1 ¼	5.12	1.26	2.36	3.78	1.54
	(130)	(32)	(60)	(96)	(0.70)
1 ½	5.12	1.50	2.56	4.29	1.94
	(130)	(38)	(65)	(109)	(0.88)
2	7.87	1.97	3.11	5.35	3.90
	(200)	(50)	(79)	(136)	(1.77)
2 ½	7.87	2.48	3.50	6.18	5.88
	(200)	(63)	(89)	(157)	(2.67)
3	7.87	2.95	3.86	7.09	8.88
	(200)	(75)	(98)	(180)	(4.03)

Accessories

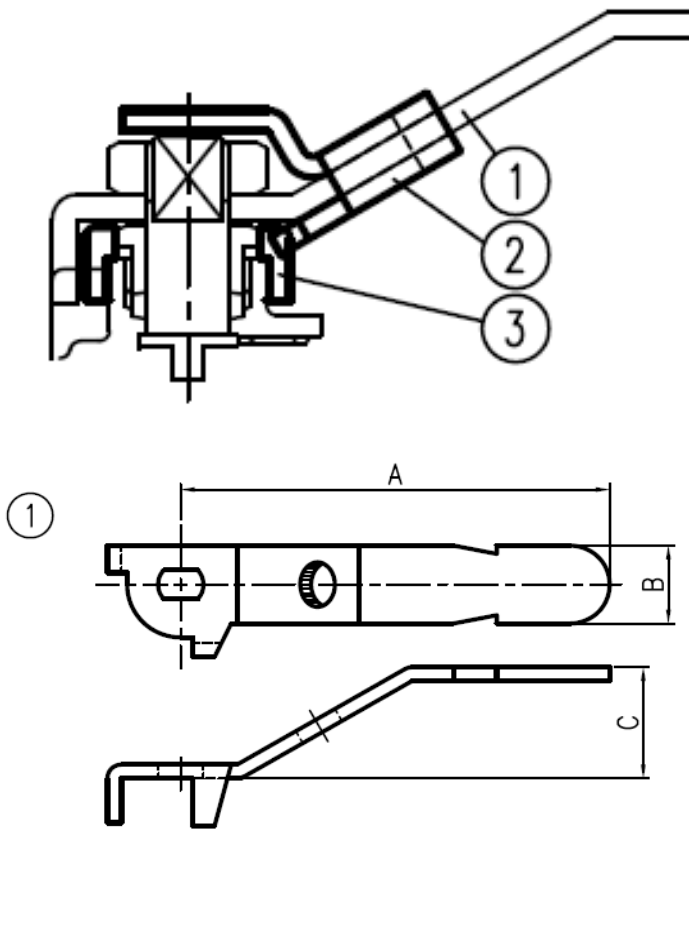
Locking Device Kit

Lever Lock Handles are suitable for use on Lever Lock ball valves. They can be latched for maintenance or operation lockout or for low security protection. Valves may be locked in open and closed positions.

Available for valves: F9202, F9222, LF9202, LF9222

Materials of Construction

No.	Description	Material
1	Handle	SS400
2	Latch Lock	SS400
3	Stop Washer	ZDC1

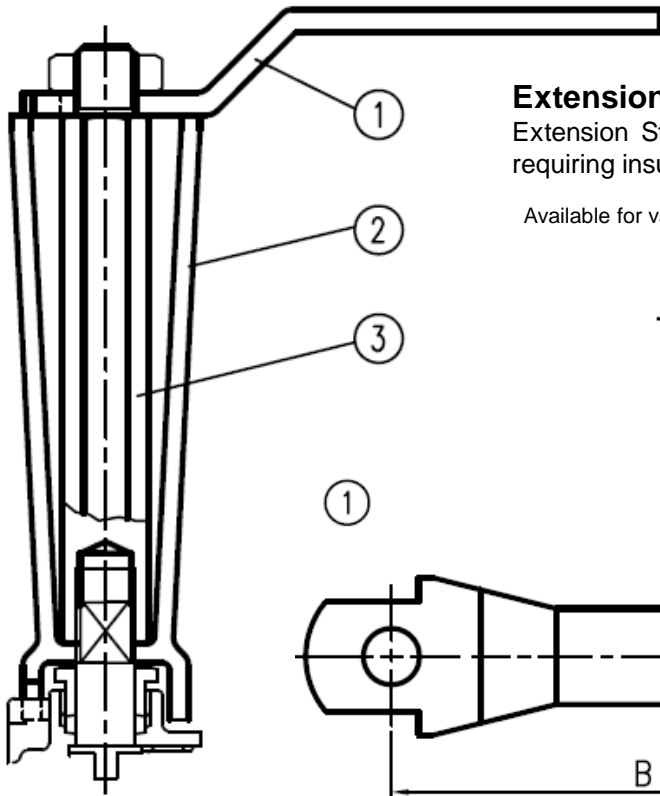


Locking Kit Dimensions and Weights

Inches (millimeters) – Pounds (Kilograms)

Valve Size	Dimensions										WT
	A	B	C	D	E	F	G	H	J	K	
¼ - ½	3.19	0.55	0.79	0.71	0.28	1.14	0.55	0.83	0.28	0.17	0.11
	-81	-14	(20)	(18)	(7)	(29)	(14)	(21)	(7)	(4.4)	(0.05)
¾ - 1	4.33	0.71	0.91	0.87	0.28	1.38	0.55	1.04	0.35	0.20	0.20
	-110	-18	(23)	(22)	(7)	(35)	(14)	(26.5)	(9)	(5)	(0.09)
1 ¼ - 1 ½	5.2	0.87	1.02	1.06	0.31	1.54	0.71	1.24	0.35	0.24	0.26
	-132	-22	(26)	(27)	(8)	(39)	(18)	(31.5)	(9)	(6.2)	(0.12)
2-4	7.91	0.98	1.26	1.18	0.35	1.97	0.87	1.75	0.43	0.30	0.57
	-201	-25	(32)	(30)	(9)	(50)	(22)	(44.5)	(11)	(7.5)	(0.26)

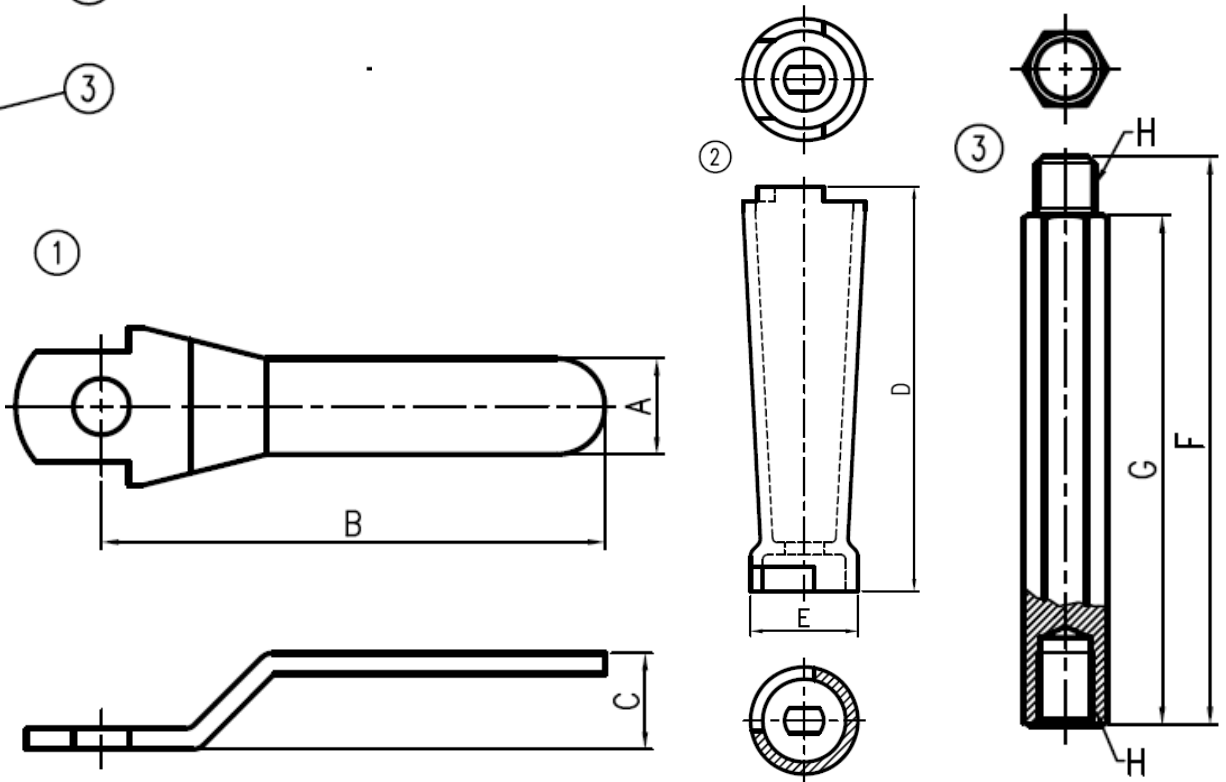
Accessories



Extension Lever Kit

Extension Stems may be needed when ball valves are installed in piping requiring insulation or in other special circumstances.

Available for valves: F9202, F9222, LF9202, LF9222



Extension Kit Dimensions and Weights

Inches (millimeters) – Pounds (Kilograms)

Valve Size	Dimensions								WT
	A	B	C	D	E	F	G	H	
¼ - ½	0.55	2.91	0.55	3.27	0.87	3.11	2.76	M 8 X 1.25	0.33
	(14)	(74)	(14)	(83)	(22)	(79)	(70)		(0.05)
¾ - 1	0.71	3.90	0.63	3.31	1.06	3.11	2.76	M 8 X 1.25	0.20
	(18)	(99)	(16)	(84)	(27)	(79)	(70)		(0.09)
1 ¼ - 1 ½	0.87	4.88	0.71	3.43	1.26	3.15	2.76	M 10 X 1.5	0.26
	(22)	(124)	(18)	(87)	(32)	(80)	(70)		(0.12)
2-4	0.98	7.80	0.79	3.54	1.69	3.23	2.72	M 16 X 1.5	0.57
	(25)	(198)	(20)	(90)	(43)	(82)	(69)		(0.26)

Installation, Operation and Maintenance Guide

For Threaded and Soldered End Brass Ball

Threaded End Ball Valves

1. Make Sure all surfaces are clear and free of debris on the piping connection.
2. Use Teflon tape or approved sealant is recommended.
3. Prepare two smooth-jawed adjustable wrenches when installing the valve. A loosely fitting pipe wrench can distort the valve and cause a leak.
4. Apply one wrench on hex nearest the joint being tightened to prevent breaking the seal between the end cap and body of the valve

Soldered End Ball Valves

1. Clean and flux before installing.
2. Cut tubing in a proper dimension square, de-burred, and clean with a solvent.
3. Turn the valve in the fully open position.
4. Wrap a wet rag around the valve body.
5. Use soft solder, a low temperature solder (420°F/ 216°C). Higher temperature solders may damage the seat material.
6. Apply heat with the flame directed away from the center of the valve body. Excessive heat can harm the seats (end cap-to-body seal and Teflon seats).
7. Check the packing gland after soldering. It may have to be tightened in 1/8 to 1/4 turn increments until leak stops.

OPERATION

To open or close the valve, turn the handle ¼ turn (90 degrees)

1. In open position – the handle rotation is counter clockwise and the handle is parallel with the valve.
2. In close position – the handle is clockwise and the handle is perpendicular with the valve.

MAINTENANCE

1. Screw the packing gland properly when the leakage occurs from steam and to tighten 1/8 to 1/4 turn increments until leak stops.
2. Add an additional packing if the leakage on step 1 continuous. The procedure of additional packing is as the following steps.
 - 2.1 Do not disassemble the valve while under pressure.
 - 2.2 Remove the handle and packing gland.
 - 2.3 Add an additional packing on the top of the old packing.
 - 2.4 Reassemble the packing gland and handle
 - 2.5 Do the leak test and make sure there is no leakage from stem

CAUTION: Do not disassemble valve while under pressure nor with entrapped hazardous fluids therein.

NOTE: Always test valve and system before putting the system into service. (Crane Supply does not recommend disassembly of this valve to attempt internal repairs).

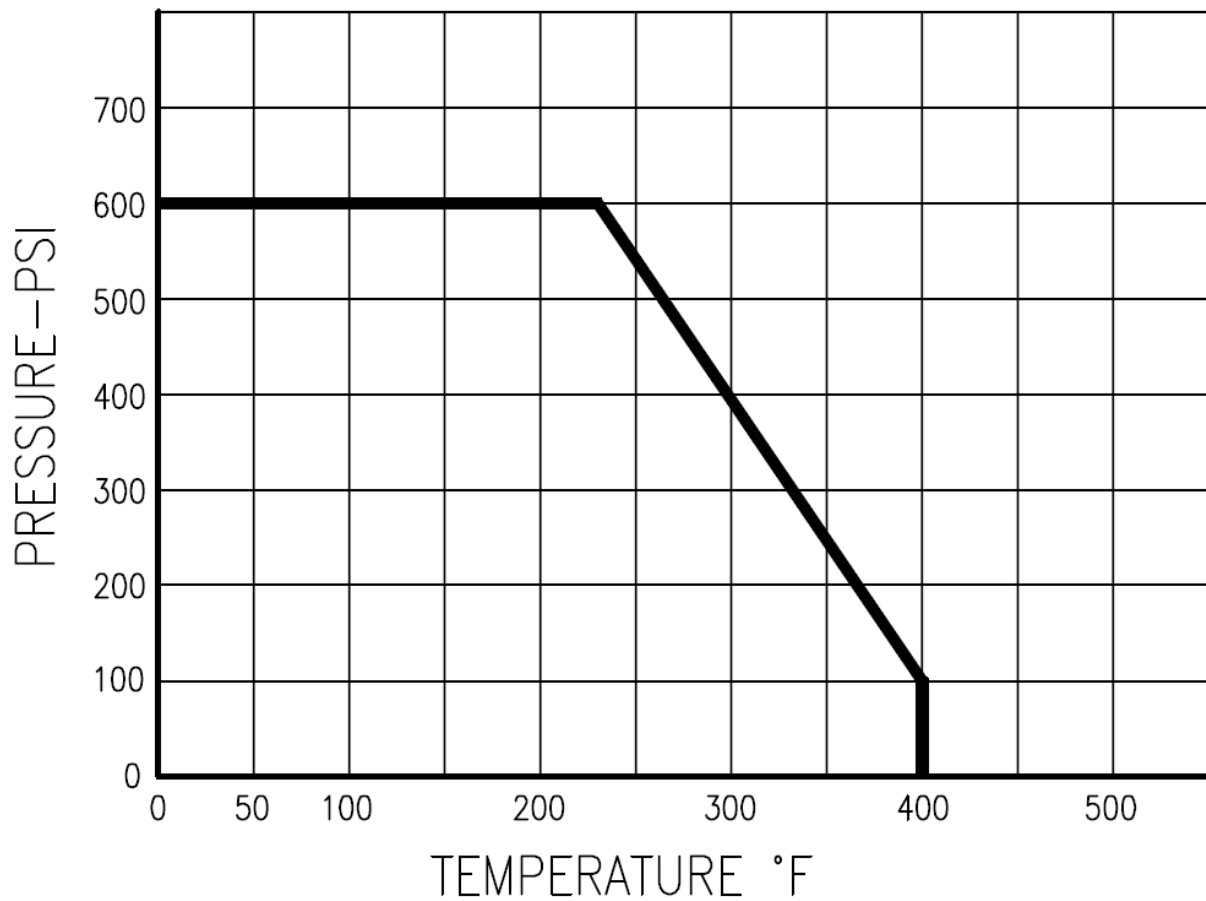
Following a policy of continuous improvement, Crane Supply reserves the right to alter any information and specifications in this brochure without prior notice.

Pressure-Temperature Ratings

The Pressure-Temperature ratings for ball valves are as shown in the chart below.

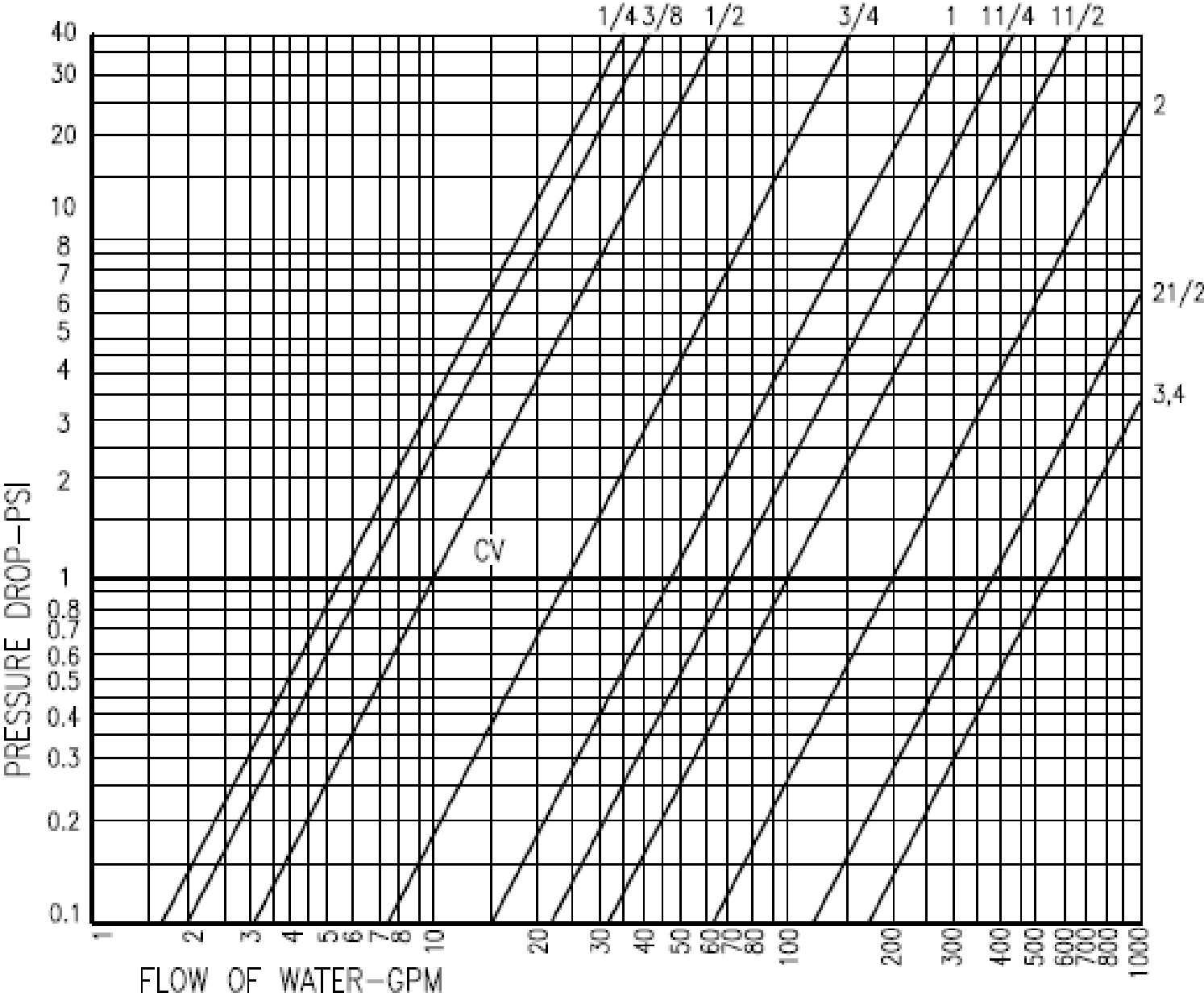
F9202, F9222, LF9202, LF9222

Pressure-Temperature Rating

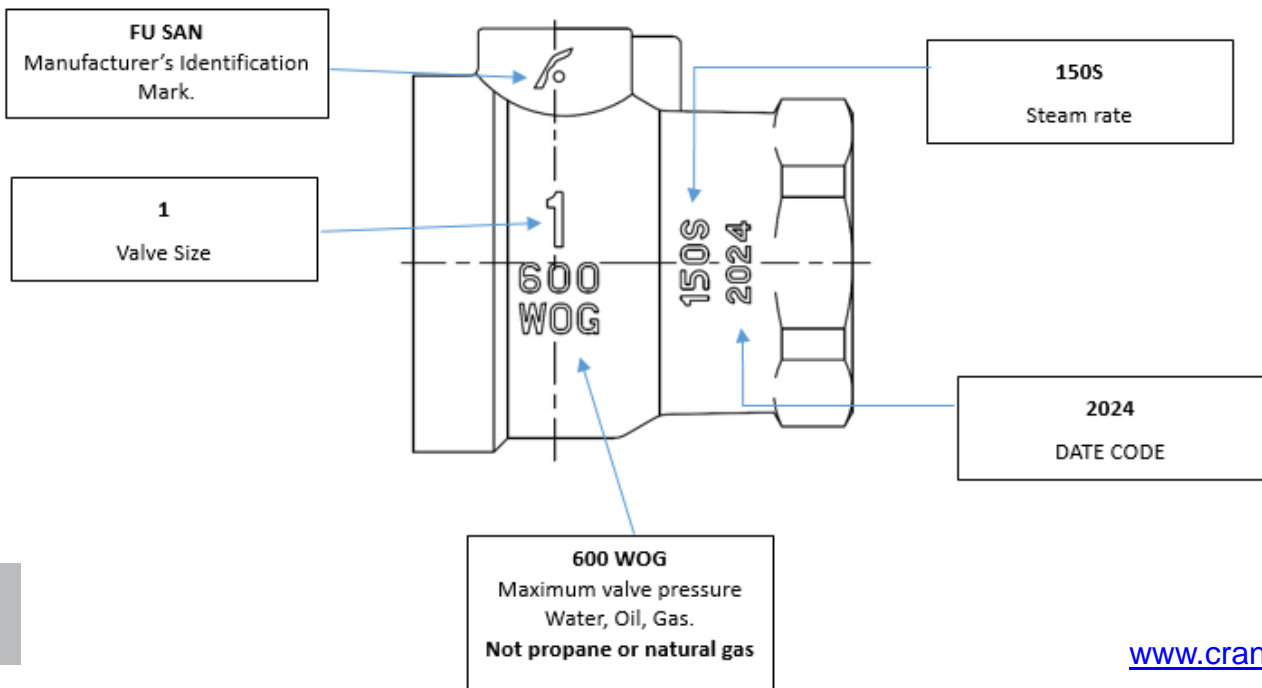
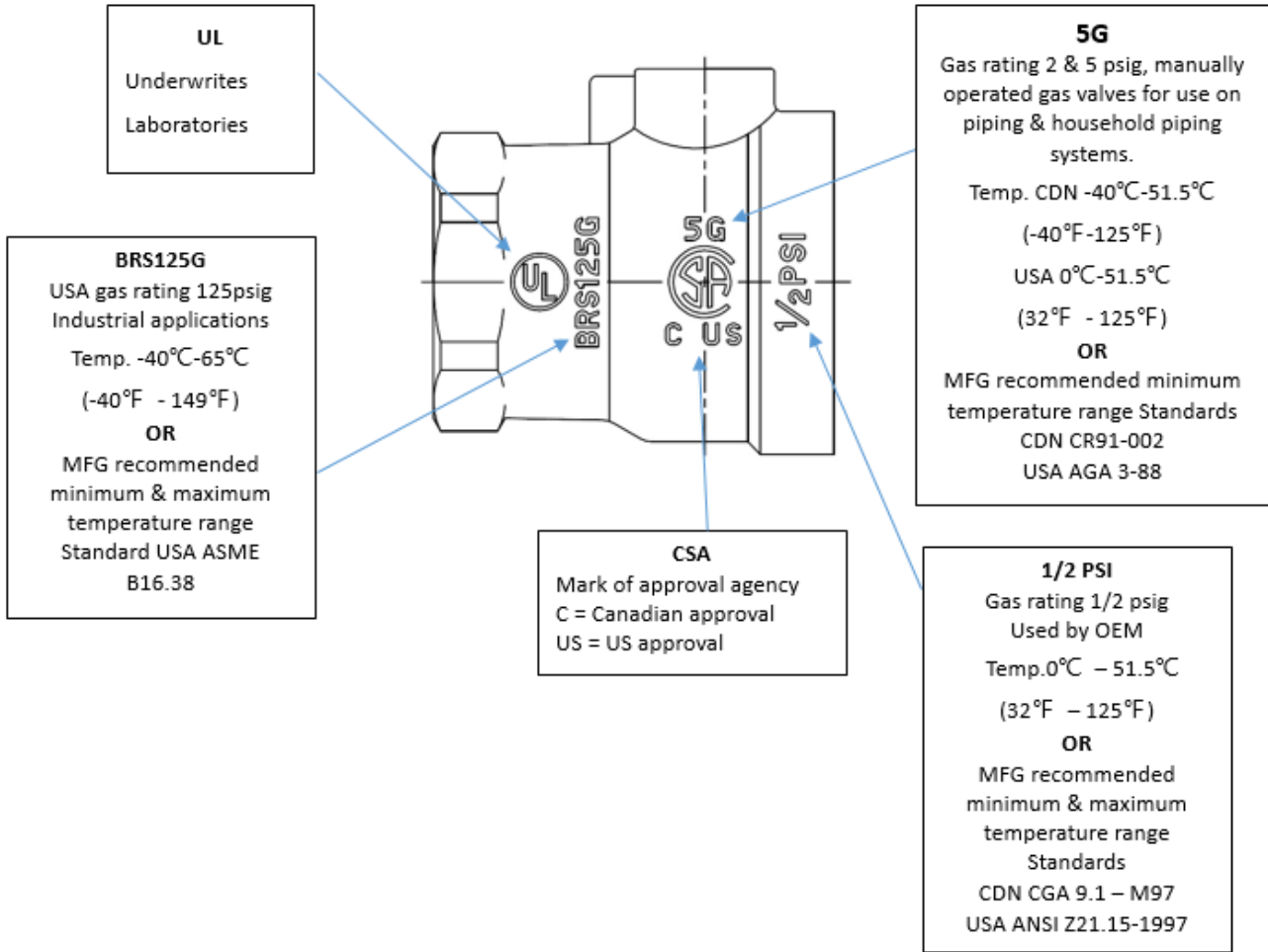


Pressure Drop/ Flow Rating Graph

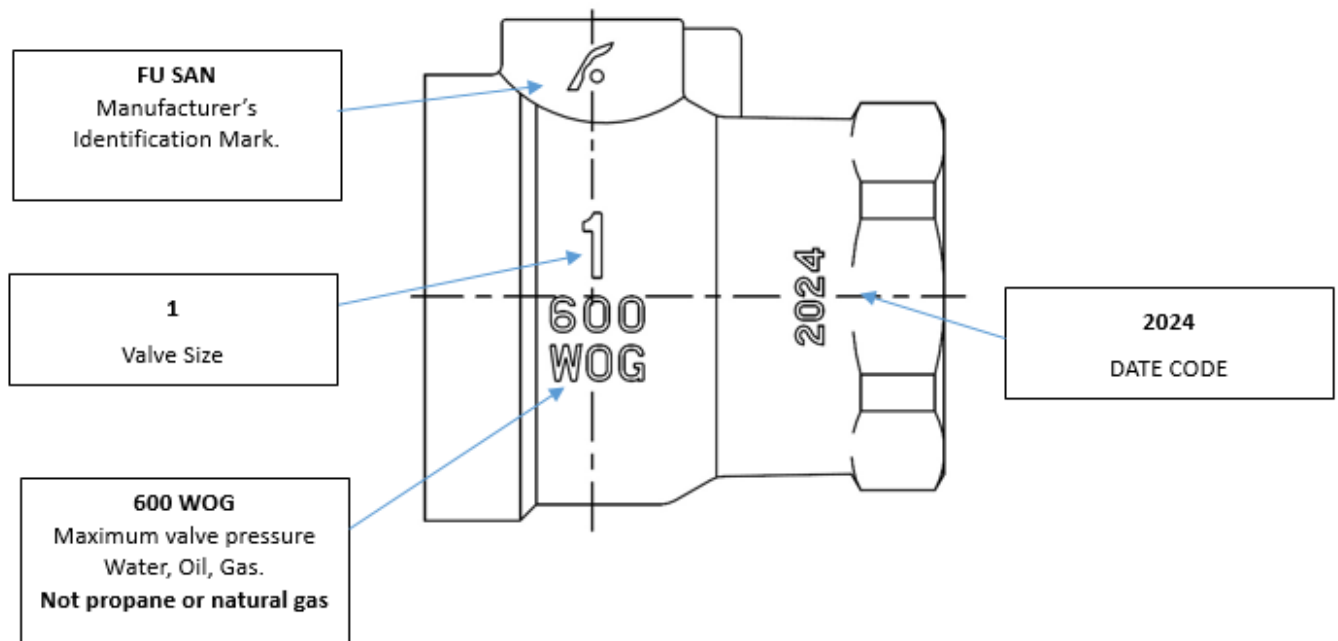
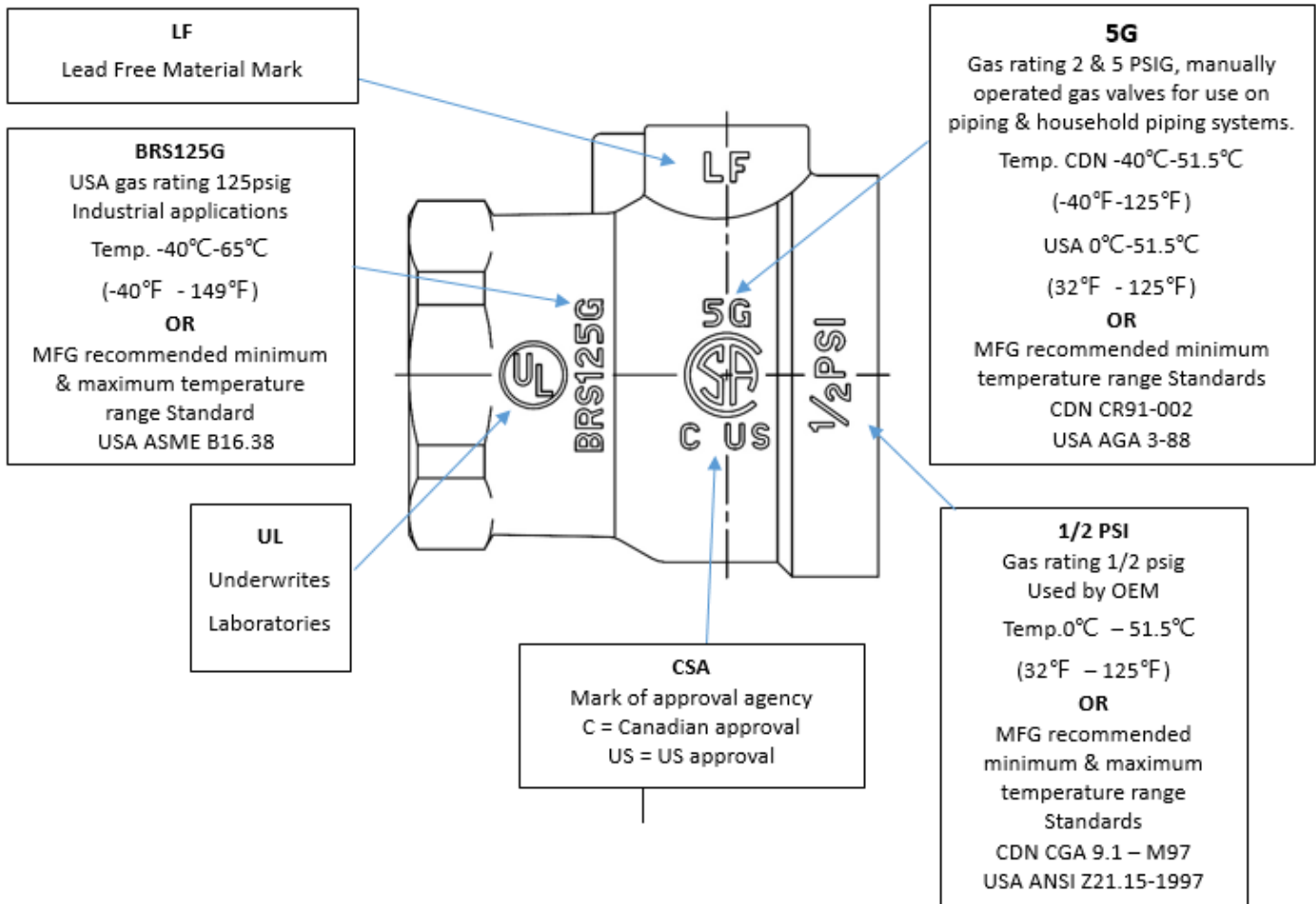
F9202, F9222, LF9202, LF9222



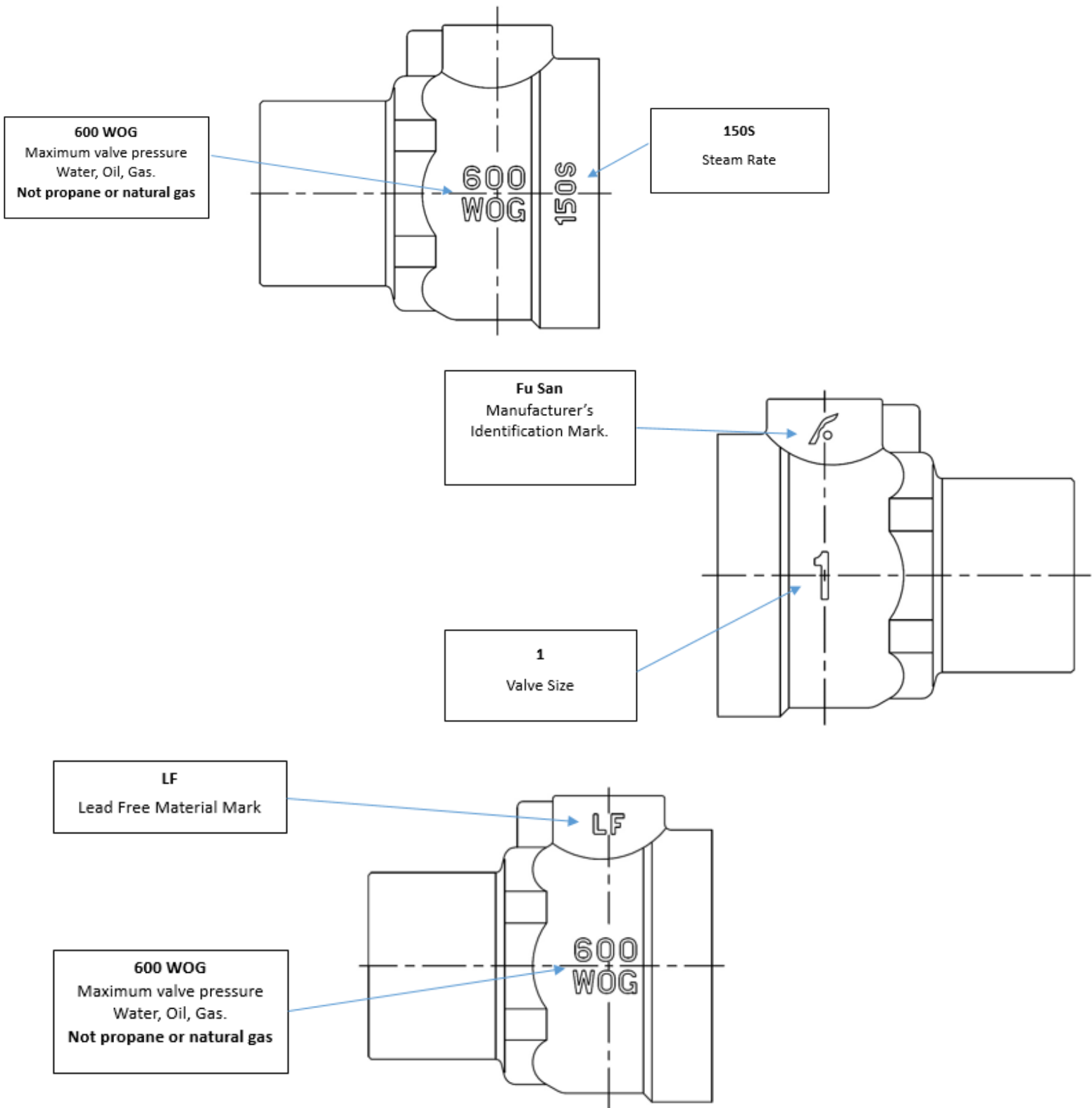
F9202 Ball Valves Approvals



Lf9202 Ball Valves Approvals



F9222/LF9222 Ball Valves Approvals





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