

 **STOCKHAM®**

brands you trust.



STOCKHAM® - Ball Valves

CRANE

Crane ChemPharma & Energy

www.cranecpe.com

Features & Benefits



Stockham® Ball Valves Key Features & Benefits:

- 1 Full Material Offering: Bronze, Brass, Lead-Free Brass, Carbon Steel and Stainless Steel
- 2 100% Factory Testing for Quality Assurance
- 3 Fully-Rated and Certified

Index

A	
Accessories	11
Actuators	12
ASME/NSF 61	7-8
B	
Balancing Plate/Memory Stop	11
Body Design	3
Brass Body Valves	4-5
D	
Design	3
E	
Extension Stems	11
F	
Features & Benefits	2
Figure Number System	3
Factory Mutual Approved	3
H	
Handle Design	3
Handle Options	11
L	
Lever Lock Handles	11
No Lead Brass Valve Offering	7-8
M	
Materials	3
P	
Pressure/Temperature Ratings	13
Q	
Quality Management	3
S	
Seat Design	3
Stem Design	3
T	
Testing	3
U	
UL® and CSA® Listed	4

Figure Number Index

Fig. No.	Page
T-255	4
S-255	5
T-285	6
LF-T-255-FB-P	7
LF-S-255-FB-P	8
T-2852-SS-R-66-LL	9
T-2852-CS-R-66-LL	10

Overview

APPLICATIONS

Stockham® ball valves have gained wide acceptance in industrial and commercial construction segments. Accurate machining and strict testing procedures ensure each user that quality is built into every valve. Stockham® ball valves are specified for service in chemical plants, petroleum refineries, pulp and paper mills, and in commercial and industrial construction projects.

BODY

Stockham® offers two-piece body style designs up to 2000# CWP. Two-piece valves offer a larger port opening, equivalent to other competitive options.

Two-piece valves are available in brass (600# CWP), bronze (600# CWP), Stainless Steel (CF8M)(2000# CWP) and Carbon Steel (WCB)(2000# CWP).

Stockham® Offers:

2 piece Carbon Steel/Stainless	Threaded to 2"
2 piece Brass valves	Threaded to 4"
2 piece Brass valves	Soldered to 3"
2 piece Bronze valves	NPT & SJ to 3"

STEM

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

All Stockham® bronze and 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 or RTFE seats.

HANDLE

Handles on threaded and solder end valves are zinc plated carbon steel or stainless steel, covered with a protective plastic sleeve with "Stockham®" imprinted on it. Handle stop is an integral part of the handle and provides positive stop as the body stop engages the handle stop. Handles are firmly attached to the stem with jam nuts. Special handles made of Type 304 stainless steel may be furnished on some valves. Other handle options are shown on page 11.

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, bronze, carbon steel, and stainless steel. 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	Special	Ends	Body Style	Body Material	Seats/Packing	Trim	Handle
1/4" - 4"	LF = No Lead	T = Threaded S = Solder Joint	255 = 2 pc. Forged, Full Port 285 = 2 pc. Cast, Full Port 2852 = 2 pc. Full Port	FB = Forged Brass BR = Cast Bronze CS = Carbon Steel SS = Stainless Steel	P = PTFE (Virgin) R = RTFE (Reinforced)	70 = Chrome Plated Brass Ball 66 = Stainless Ball & Stem	Lever LL = Locking Lever EL = Extended Lever SL = Stainless Steel Lever

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

* Hose caps, when provided, are for thread protection and not intended to be used as primary sealing device.

Quality Management

Stockham® is committed to a philosophy of total quality management. It begins with design, to comply 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.

Dimensions 600 CWP/150 SWP • Full Port • Threaded Ends

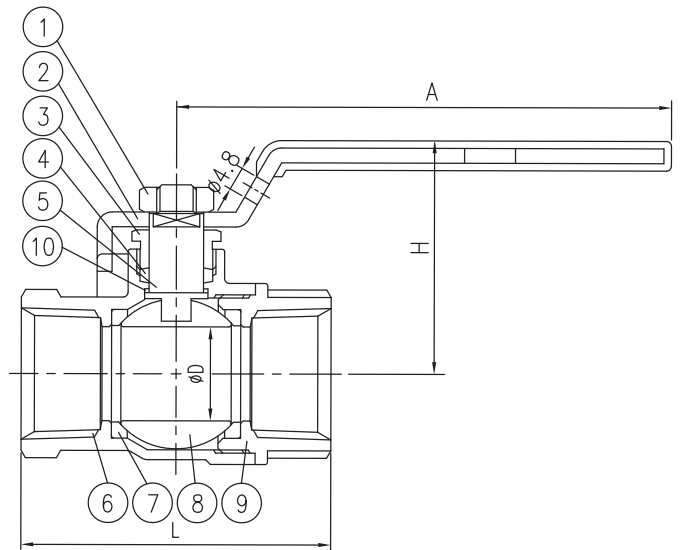
T-255

Forged Brass, 2-Piece Body, Meets MSS SP-110,
CSA/UL/FM Approval (½ - 2" only)

Materials of Construction

No.	Description	Material
1	Nut	AISI-1010
2	Handle	A283-D
3	Stem Gland Screw	B16-C36000
4	Stem Packing	PTFE
5	Stem	B16-C36000
6	Body	B124-C37700 B584-C85700 (2" - 4")
7	Seat	PTFE
8	Ball	B16-C36000 or B124-C37700 (1" - 4")
9	End Plug	B124-C37700
10	Thrust Washer	PTFE (2" - 4")

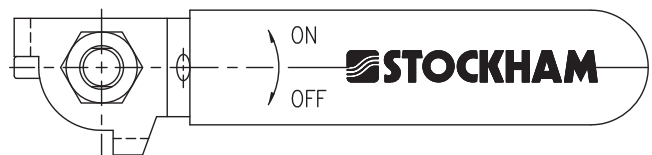
For optional Accessories see Page 10.



Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions				Wt.
	A	D	H	L	
¼	1.97	0.35	1.26	1.69	0.35
	(50)	(9)	(32)	(43)	(0.16)
⅜	2.95	0.39	1.46	1.81	0.35
	(75)	(10)	(37)	(46)	(0.16)
½	2.95	0.50	1.50	2.13	0.42
	(75)	(13)	(38)	(54)	(0.19)
¾	3.94	0.75	1.85	2.48	0.84
	(100)	(19)	(47)	(63)	(0.38)
1	3.94	0.98	2.05	2.99	1.25
	(100)	(25)	(52)	(76)	(0.57)
1¼	4.92	1.25	2.36	3.35	1.83
	(125)	(32)	(60)	(85)	(0.83)
1½	4.92	1.50	2.56	3.62	2.49
	(125)	(38)	(65)	(92)	(1.13)
2	7.87	1.97	3.11	4.25	4.58
	(200)	(50)	(79)	(108)	(2.08)
2½	7.87	2.48	3.50	5.16	7.71
	(200)	(63)	(89)	(131)	(3.50)
3	7.87	2.95	3.86	5.91	10.64
	(200)	(75)	(98)	(150)	(4.83)
4	7.87	3.97	3.86	6.26	13.22
	(200)	(96)	(98)	(159)	(6.00)



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 81 - Appliance Connector - 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
- CLASS 3371 01 - Appliance Connector
- CLASS 3371 10
- CLASS 3371 90

Dimensions 600 CWP/150 SWP • Full Port • Solder Ends

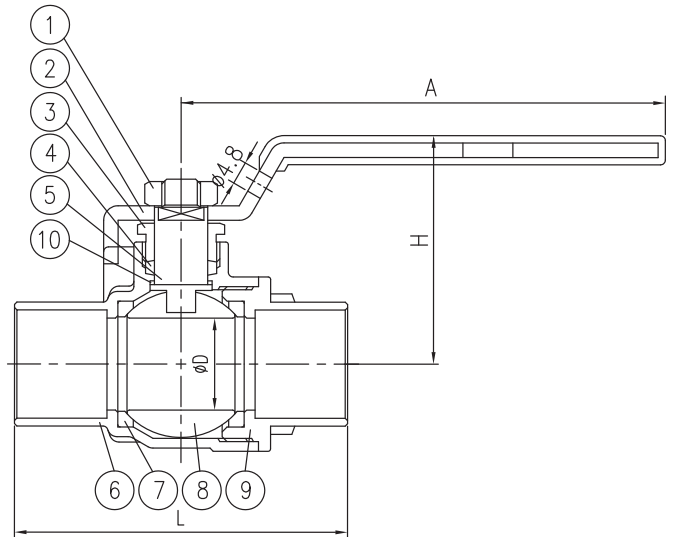
S-255

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

Materials of Construction

No.	Description	Material
1	Nut	AISI-1010
2	Handle	A283-D
3	Stem Gland Screw	B16-C36000
4	Stem Packing	PTFE
5	Stem	B16-C36000
6	Body	B124-C37700 B584-C85700 (2" - 3")
7	Seat	PTFE
8	Ball	B16-C36000 or B124-C37700 (3/4" - 3")
9	End Plug	B124-C37700
10	Thrust Washer	PTFE (2" - 3")

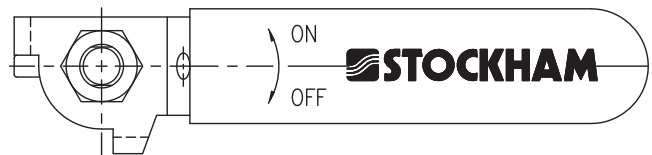
For optional Accessories see Page 10.



Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions				Wt.
	A	D	H	L	
½	2.95	0.50	1.50	1.93	0.37
	(75)	(13)	(38)	(49)	(0.17)
¾	3.94	0.75	1.85	2.72	0.79
	(100)	(19)	(47)	(69)	(0.36)
1	3.94	0.98	2.05	3.31	1.16
	(100)	(25)	(52)	(84)	(0.53)
1¼	4.92	1.25	2.36	3.78	1.65
	(125)	(32)	(60)	(96)	(0.75)
1½	4.92	1.50	2.56	4.29	2.20
	(125)	(38)	(65)	(109)	(1.00)
2	7.87	1.97	3.11	5.35	4.40
	(200)	(50)	(79)	(136)	(2.00)
2½	7.87	2.48	3.50	6.18	6.90
	(200)	(63)	(89)	(157)	(3.13)
3	7.87	2.95	3.86	7.09	9.92
	(200)	(75)	(98)	(180)	(4.50)



Dimensions 600 CWP/150 SWP • Full Port • Threaded Ends

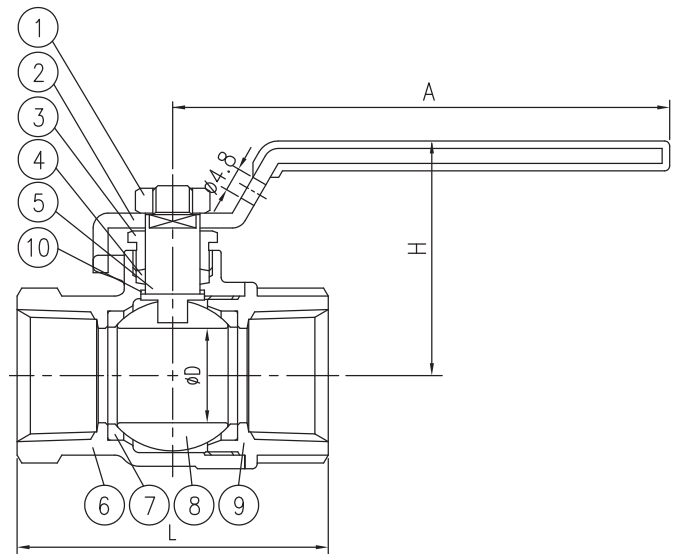
T-285

Cast Bronze, 2-Piece Body, Chrome Plated Brass Ball,
Meets MSS SP-110

Materials of Construction

No.	Description	Material
1	Nut	AISI-1010
2	Handle	A283-D
3	Stem Gland Screw	B16-C36000
4	Stem Packing	PTFE
5	Stem	B16-C36000
6	Body	B584-C84400
7	Seat	PTFE
8	Ball	B16-C36000 or B124-C37700 (1" - 3")
9	End Plug	B584-C84400
10	Thrust Washer	PTFE

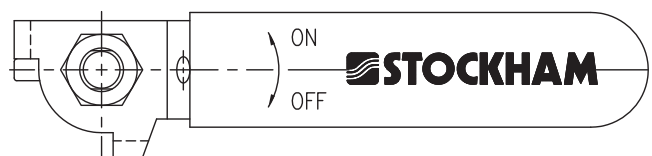
For optional Accessories see Page 10.



Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions				Wt.
	A	D	H	L	
¼	1.97	0.35	1.26	1.69	0.37
	(50)	(9)	(32)	(43)	(0.17)
⅜	2.95	0.39	1.46	1.81	0.31
	(75)	(10)	(37)	(46)	(0.14)
½	2.95	0.50	1.50	2.13	0.39
	(75)	(13)	(38)	(54)	(0.18)
¾	3.94	0.75	1.85	2.48	0.86
	(100)	(19)	(47)	(63)	(0.39)
1	3.94	0.98	2.05	2.99	1.25
	(100)	(25)	(52)	(76)	(0.57)
1¼	4.92	1.25	2.36	3.35	1.52
	(125)	(32)	(60)	(85)	(0.69)
1½	4.92	1.50	2.56	3.62	1.83
	(125)	(38)	(65)	(92)	(0.83)
2	7.87	1.97	3.11	4.25	5.51
	(200)	(50)	(79)	(108)	(2.50)
2½	7.87	2.48	3.50	5.16	9.37
	(200)	(63)	(89)	(131)	(4.25)
3	7.87	2.95	3.86	5.91	13.60
	(200)	(75)	(98)	(180)	(6.17)



Dimensions 600 CWP • Full Port • Threaded Ends

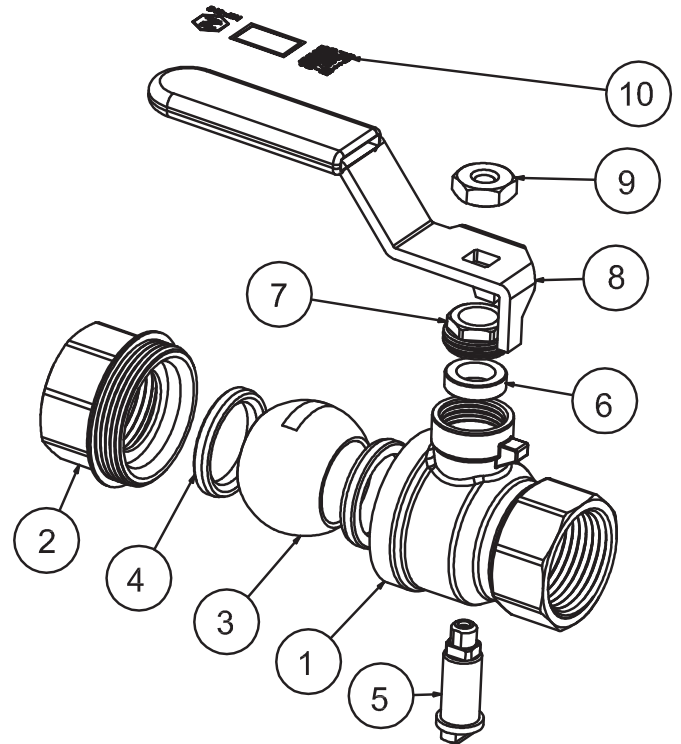
LF-T-255-FB-P

Forged No Lead Brass, 2-Piece Body, NSF/ANSI/CAN 61 & 372

Materials of Construction

No.	Description	Material
1	Body	C46400
2	Fixed End	C46400
3	Ball	C46400
4	Seat	PTFE
5	Stem	B16-C36000
6	Packing Ring	PTFE
7	Packing Nut	B16-C36000
8	Handle	A283-D
9	Nut	ANSI-1010
10	Print	Black Color

For optional Accessories see Page 10.

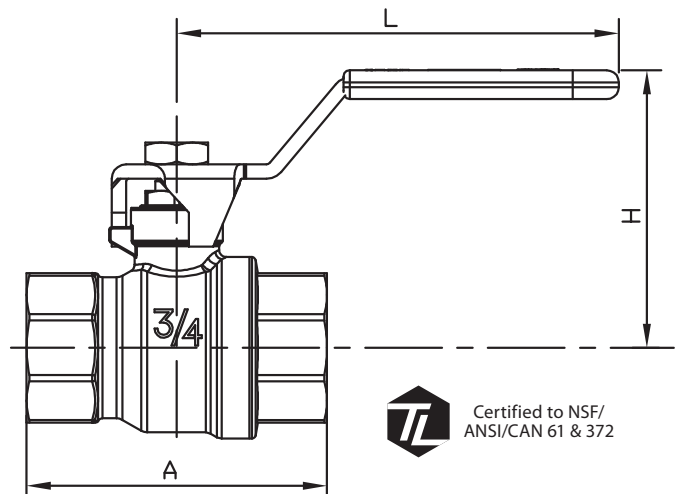


Valves are rated to 600CWP only and are not intended for use on steam service.

Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions			Wt.
	A	H	L	
½	2.12	2.11	3.60	0.46
	(54)	(54)	(91)	(.21)
¾	2.44	2.26	3.60	0.64
	(62)	(57)	(91)	(.29)
1	2.85	2.60	4.98	1.04
	(72)	(66)	(126)	(.47)
1¼	3.27	2.85	4.98	1.65
	(83)	(72)	(126)	(.75)
1½	3.79	3.23	5.59	2.38
	(96)	(82)	(142)	(1.08)
2	4.35	3.52	5.59	3.64
	(110)	(89)	(142)	(1.65)



Certified to NSF/ANSI/CAN 61 & 372

Dimensions 600 CWP • Full Port • Solder Ends

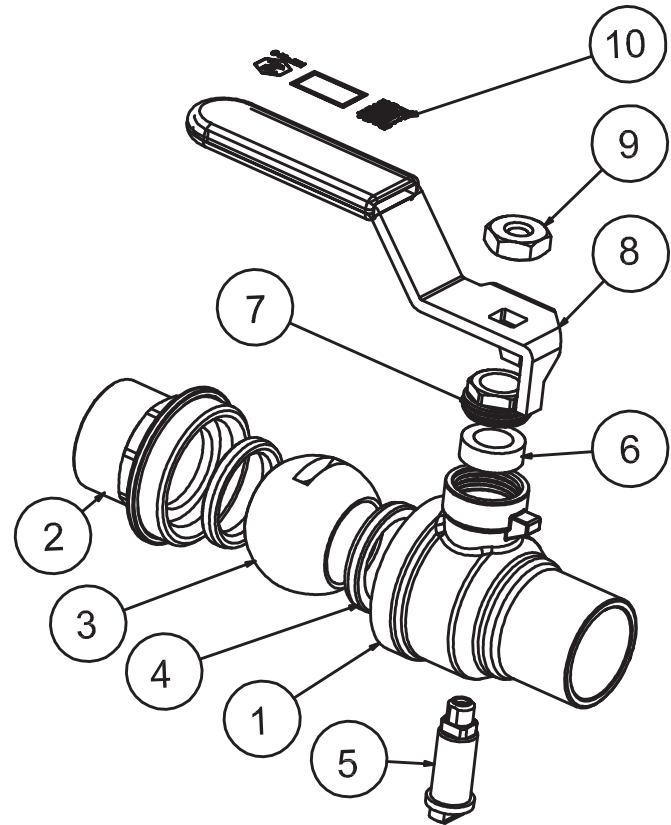
LF-S-255-FB-P

Forged No Lead Brass, 2-Piece Body, NSF/ANSI/CAN 61 & 372

Materials of Construction

No.	Description	Material
1	Body	C46400
2	Fixed End	C46400
3	Ball	C46400
4	Seat	PTFE
5	Stem	B16-C36000
6	Packing Ring	PTFE
7	Packing Nut	B16-C36000
8	Handle	A283-D
9	Nut	AISI-1010
10	Print	Black Color

For optional Accessories see Page 10.

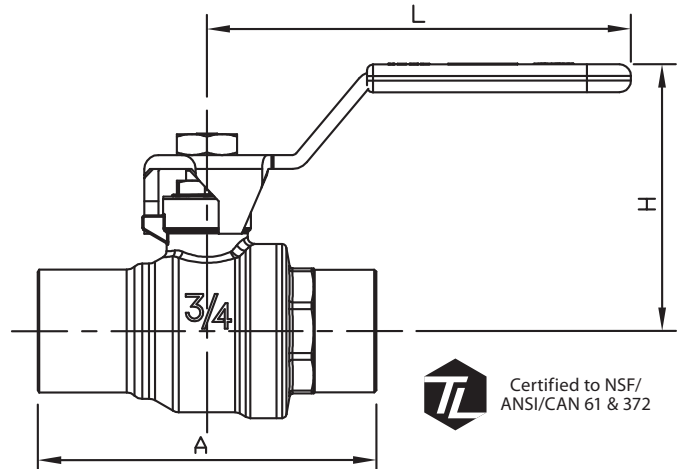


Valves are rated to 600CWP only and are not intended for use on steam service.

Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)

Valve Size	Dimensions			Wt.
	A	H	L	
½	2.13	2.11	3.60	0.44
	(54)	(54)	(91)	(.20)
¾	2.87	2.26	3.60	0.60
	(73)	(57)	(91)	(.27)
1	3.39	2.60	4.98	.97
	(86)	(66)	(126)	(.44)
1¼	3.90	2.85	4.98	1.41
	(99)	(72)	(126)	(.64)
1½	4.53	3.23	5.59	2.36
	(115)	(82)	(142)	(1.07)
2	5.51	3.52	5.59	3.35
	(140)	(89)	(142)	(1.52)

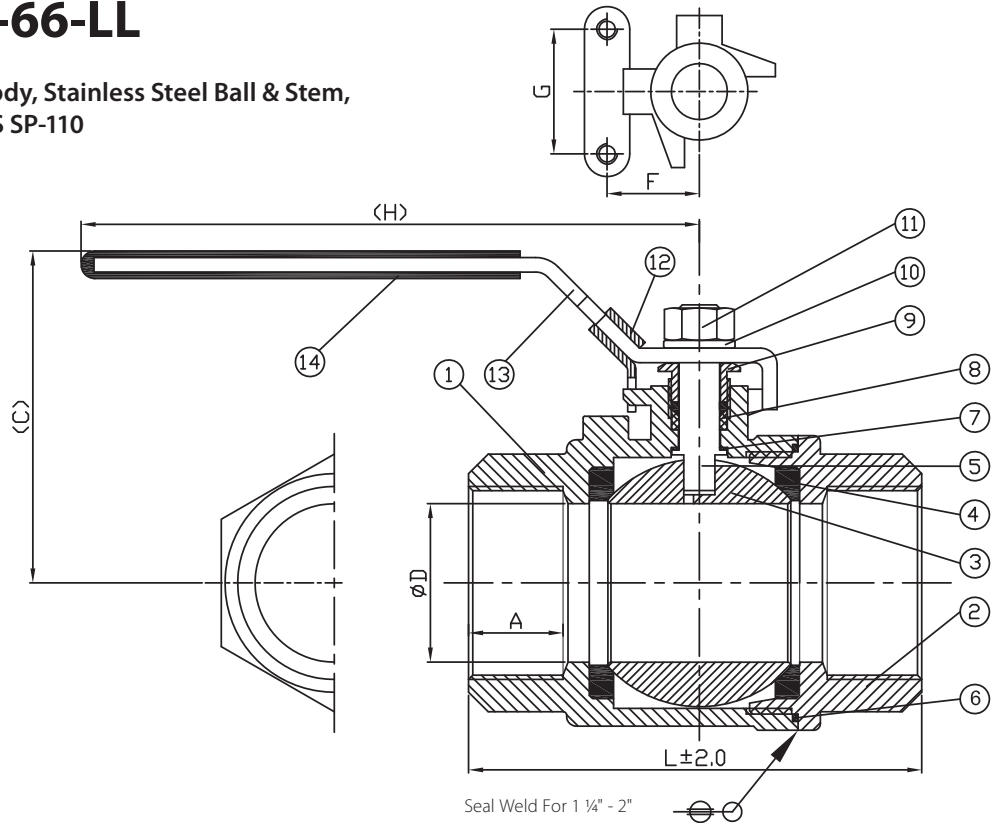


Certified to NSF/ANSI/CAN 61 & 372

Dimensions 2000 CWP • Full Port • Threaded Ends

T-2852-SS-R-66-LL

Stainless Steel, 2-Piece Body, Stainless Steel Ball & Stem, Locking Lever, Meets MSS SP-110



Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)
 Pound-Force Foot (Newton Meter)

Valve Size	Dimensions							Wt.	Torque	C _v Factor
	D	L	C	H	F	G	A			
1/4	.45	1.97	2.17	4.13	.50	1.12	.49	.66	3	6.6
	(12)	(50)	(55)	(105)	(13)	(29)	(13)	(.30)	(4)	
3/8	.49	2.36	2.17	4.13	.50	1.12	.55	.66	5	7.9
	(13)	(60)	(55)	(105)	(13)	(29)	(14)	(.30)	(6)	
1/2	.59	2.95	2.24	4.13	.50	1.12	.70	.88	6	11.2
	(15)	(75)	(57)	(105)	(13)	(29)	(18)	(.40)	(8)	
3/4	.79	3.15	2.68	4.84	.87	1.38	.75	1.32	9	21
	(20)	(80)	(68)	(123)	(22)	(35)	(19)	(.60)	(12)	
1	.98	3.54	2.87	6.10	.87	1.38	.89	2.09	11	35
	(25)	(90)	(73)	(155)	(22)	(35)	(23)	(.95)	(15)	
1 1/4	1.26	4.33	3.35	6.10	.93	1.50	.98	3.2	19	57
	(32)	(110)	(85)	(155)	(24)	(38)	(25)	(1.45)	(25)	
1 1/2	1.50	4.72	3.82	7.52	.93	1.50	.98	4.96	26	80
	(38)	(120)	(97)	(191)	(24)	(38)	(25)	(2.25)	(35)	
2	1.93	5.51	4.09	7.52	1.14	1.50	1.15	7.28	34	150
	(49)	(140)	(104)	(191)	(29)	(38)	(29)	(3.30)	(45)	

Materials of Construction

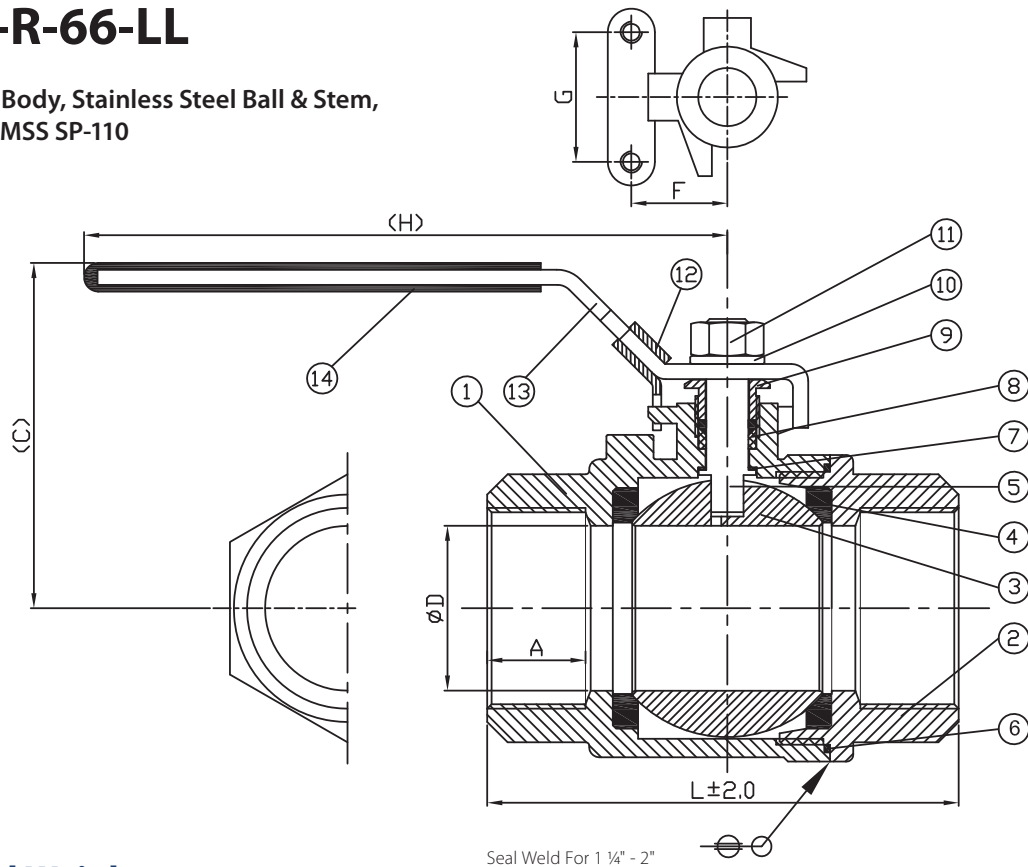
No.	Description	Material
1	Body	CF8M
2	Cap	CF8M
3*	Ball (Vented)	CF8M
4	Seat	RTFE - PTFE 15% GF
5	Stem	AISI 316
6	Body Seal	PTFE (for 1/4" - 1")
7	Thrust Washer	PTFE
8	Stem Packing	PTFE
9	Gland Nuts	A2
10	Spring Washer	AISI 304
11	Handle Nuts	A2
12	Locking Device	AISI 304
13	Handle	AISI 304
14	Handle Sleeve	PVC

* All carbon and stainless ball valves come standard with a stainless steel ball. For optional Accessories see Page 10.

Dimensions 2000 CWP • Full Port • Threaded Ends

T-2852-CS-R-66-LL

Carbon Steel, 2-Piece Body, Stainless Steel Ball & Stem,
Locking Lever, Meets MSS SP-110



Dimensions and Weights

Inches (millimeters) - Pounds (kilograms)
Pound-Force Foot (Newton Meter)

Valve Size	Dimensions							Wt.	Torque	C _v Factor
	D	L	C	H	F	G	A			
1/4	.45	2.38	2.17	4.13	.50	1.12	.49	.66	3	6.6
	(12)	(61)	(55)	(105)	(13)	(29)	(13)	(.30)	(4)	
3/8	.49	2.38	2.17	4.13	.50	1.12	.55	.66	5	7.9
	(13)	(61)	(55)	(105)	(13)	(29)	(14)	(.30)	(6)	
1/2	.59	2.38	2.24	4.13	.50	1.12	.70	.88	6	11.2
	(15)	(61)	(57)	(105)	(13)	(29)	(18)	(.40)	(8)	
3/4	.79	3.03	2.68	4.84	.87	1.38	.75	1.32	9	21
	(20)	(77)	(68)	(123)	(22)	(35)	(19)	(.60)	(12)	
1	.98	3.54	2.87	6.10	.87	1.38	.89	2.09	11	35
	(25)	(90)	(73)	(155)	(22)	(35)	(23)	(.95)	(15)	
1 1/4	1.26	3.94	3.35	6.10	.93	1.50	.98	3.2	19	57
	(32)	(100)	(85)	(155)	(24)	(38)	(25)	(1.45)	(25)	
1 1/2	1.50	4.65	3.82	7.52	.93	1.50	.98	4.96	26	80
	(38)	(118)	(97)	(191)	(24)	(38)	(25)	(2.25)	(35)	
2	1.93	5.43	4.09	7.52	1.14	1.50	1.15	7.28	34	150
	(49)	(138)	(104)	(191)	(29)	(38)	(29)	(3.3)	(45)	

Materials of Construction

No.	Description	Material
1	Body	WCB
2	Cap	WCB
3*	Ball (Vented)	CF8M
4	Seat	RTFE - PTFE 15% GF
5	Stem	AISI 316
6	Body Seal	PTFE (for 1/4" - 1")
7	Thrust Washer	PTFE
8	Stem Packing	PTFE
9	Gland Nuts	A2
10	Spring Washer	AISI 304
11	Handle Nuts	A2
12	Locking Device	AISI 304
13	Handle	AISI 304
14	Handle Sleeve	PVC

* All carbon and stainless ball valves come standard with a stainless steel ball.
For optional Accessories see Page 16.

Accessories



Extension Stems

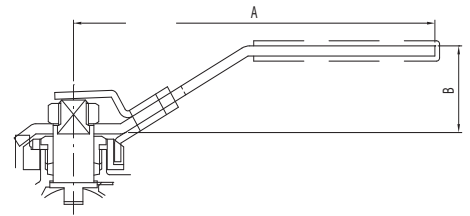
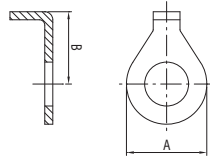
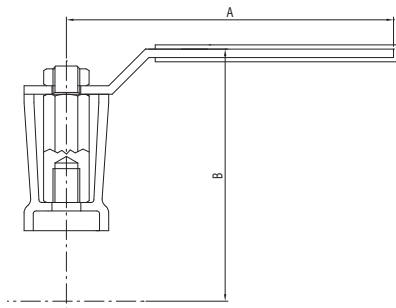
Extension stems may be needed when ball valves are installed in piping requiring insulation or in other special circumstances.

Memory Stop

Continuous operation of a ball valve in partially open position is not recommended. Stockham® does not recommend that a ball valve be used in a position less than 50% full open.

Lever Lock Handles

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 only in brass as an accessory. Other handle options (not shown): Stainless Steel Handles.



2 1/4" Extension Stems Dimensions

Inches (millimeters)

Valve Size	Dimensions	
	A	B
1/4	3.30	4.37
	(84)	(111)
3/8	3.30	4.37
	(84)	(111)
1/2	3.30	4.40
	(84)	(112)
3/4	4.64	4.88
	(118)	(124)
1	4.64	5.03
	(118)	(128)
1 1/4	5.27	5.47
	(134)	(139)
1 1/2	5.27	5.62
	(134)	(143)
2	7.87	6.25
	(200)	(159)
2 1/2	7.87	6.65
	(200)	(169)
3	7.87	6.96
	(200)	(177)

Available for valves: T-255, S-255, LFT-255, LFS-255, T-285, S-28

Memory Stop Dimensions

Inches (millimeters)

Valve Size	Dimensions	
	A	B
1/4	.59	.55
	(15)	(14)
3/8	.59	.55
	(15)	(14)
1/2	.59	.55
	(15)	(14)
3/4	.74	.66
	(19)	(17)
1	.74	.66
	(19)	(17)
1 1/4	.90	.78
	(23)	(20)
1 1/2	.90	.78
	(23)	(20)
2	1.25	1.10
	(32)	(28)
2 1/2	1.25	1.10
	(32)	(28)
3	1.25	1.10
	(32)	(28)

Available for valves: T-255, S-255, T-285, S-285

Lever Lock Handles Dimensions

Inches (millimeters)

Valve Size	Dimensions	
	A	B
1/4	3.22	.78
	(82)	(20)
3/8	3.22	.78
	(82)	(20)
1/2	3.22	.78
	(82)	(20)
3/4	4.52	1.02
	(115)	(26)
1	4.52	1.02
	(115)	(26)
1 1/4	5.19	1.02
	(132)	(26)
1 1/2	5.19	1.02
	(132)	(26)
2	7.55	.94
	(192)	(24)
2 1/2	7.55	.94
	(192)	(24)
3	7.55	.94
	(192)	(24)

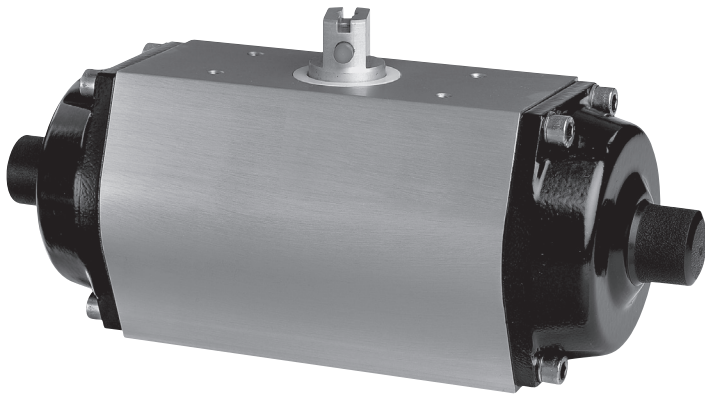
Available for valves: T-255, S-255

Actuators

Actuators

Stockham® ball valves can be supplied with pneumatic or electric actuators. Valves with pads for simplified mounting include:

- ½" through 2"
- Carbon or Stainless Steel Body
- 2-Piece Ball Valves



For Threaded End Valves, ¼" - 4"

Electric

- **Standard** - 120 VAC, 60Hz, single phase, reversing motor; thermal overload protection; manual override, 100% duty cycle; rated torques from 347 to 868 in-lbs.

To order, please supply the following information:

1. Valve figure number and size
2. Line pressure
3. Electrical supply
4. NEMA Code requirements
5. Special requirements

Pneumatic

- Models provide 61 to 71,687 in-lbs. of torque with 80 psi supply air.
- Models for fail-safe applications provide output torques from 20 to 67,356 in-lbs. with 80 psi supply air.
- Include solenoid valves (direct mounted) and limit switches.

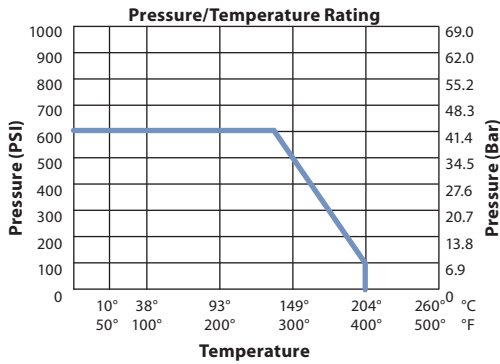
To order, please supply the following information:

1. Valve figure number and size
2. Line pressure
3. Air supply pressure (minimum)
4. Double-Acting or Spring Return
5. If spring return, indicate fail-open or fail-close
6. Require limit switches or solenoid valve

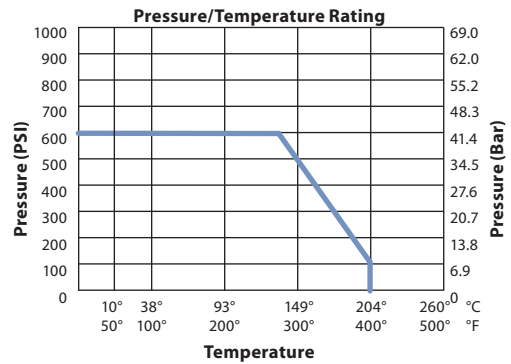
Pressure/Temperature Ratings

The Pressure/Temperature ratings for ball valves are as shown in the charts below.

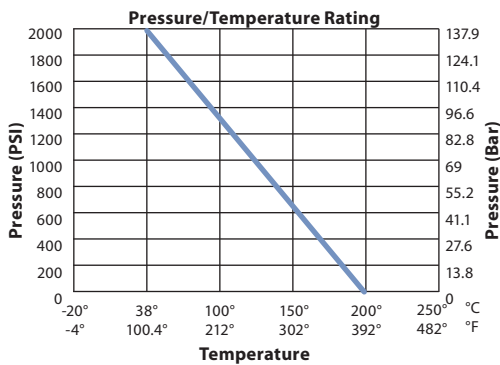
T-255, S-255 and T-285



LF-T-255-FB-P and LF-S-255-FB-P



T-2852-CS-R-66-LL and T-2852-SS-R-66-LL





Crane ChemPharma & Energy

CRANE Energy Global Headquarters
4526 Research Forest Drive, Suite 400
The Woodlands, Texas 77381 U.S.A.

Tel.: (1) 936-271-6500

Fax.: (1) 936-271-6510

www.cranecpe.com



Stockham® Customer Service

2129 3rd Avenue, S.E.

Cullman, Alabama 35055

Tel.: (1) 800-STOCKHAM

Fax.: (1) 256-775-3860

brands you trust.



COMPAC-NOZ



DEPA

ELRO **DUO-CHEK**



NOZ-CHEK



RESISTOFLEX



UNI-CHEK

w.ta

XOMOX

Crane Co., and its subsidiaries cannot accept responsibility for possible errors in catalogues, brochures, other printed materials, and website information. Crane Co. reserves the right to alter its products without notice, including products already on order provided that such alteration can be made without changes being necessary in specifications already agreed. All trademarks in this material are property of the Crane Co. or its subsidiaries. The Crane and Crane brands logotype, in alphabetical order, (ALOYCO®, CENTER LINE®, COMPAC-NOZ®, CRANE®, DEPA®, DUO-CHEK®, ELRO®, FLOWSEAL®, JENKINS®, KROMBACH®, NOZ-CHEK®, PACIFIC VALVES®, RESISTOFLEX®, REVO®, SAUNDERS®, STOCKHAM®, TRIANGLE®, UNI-CHEK®, WTA®, and XOMOX®) are registered trademarks of Crane Co. All rights reserved.