



LEAD FREE VALVES



AHEAD OF THE FLOW®

CATALOG C-LFV-1118

THE LEAD FREE AUTHORITY



WROT COPPER & CAST PERFORMANCE BRONZE®

- Sweat and thread
- Size range: 1/8" to 8"



NIBCO® PRESS SYSTEM®

- Wrot copper and cast Performance Bronze
- Size range: ½" to 4"



NIBCO® PUSH

- · Brass fittings and valves
- Size range: ½" to 1"



FLANGES

- 1-piece cast Performance Bronze
 - Size range: 1" to 6"
- 2-piece copper
 - Size range: 3/4" to 6"



NIBCO® PEX PIPING SYSTEMS

- · Performance Bronze fittings and valves
- Size range: ½" to 1"



CPVC-CTS FITTINGS

- · Suitable for hot and cold water distribution
- Size range: ½" to 1"



THE LARGEST VALVE PACKAGE IN THE INDUSTRY

- Performance Bronze ball, gate and check
- Iron butterfly, gate and check
- Plumbing

Visit us at www.nibcoleadfree.com for our full lead-free offering.



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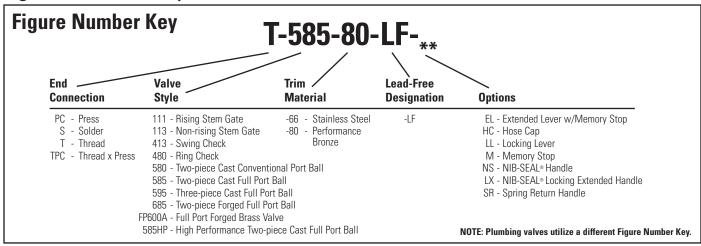
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HydraPure® Performance Bronze® Commercial Valves

Figure Number Key for Threaded, Solder and Press Ends



LEAD-FREE: Weighted average lead content ≤ 0.25%

Visit our website for the most current information.

TURN TO EXPERIENCE

AHEAD OF ITS TIME

For over two decades, NIBCO has led the industry in the development of lead-free alloys and commercialization of lead-free plumbing products. NIBCO first introduced a lead-free alloy into the domestic plumbing market in 1992.

INDUSTRY-WIDE CHALLENGE

Reduce the allowable lead content in the Safe Drinking Water Act and other equivalent state regulations from 8% to .25% maximum by weighted average.

NIBCO SOLUTION

NIBCO developed a line of valves produced from Performance Bronze® lead-free alloys, a family of high-quality, time-proven silicon alloys. The mechanical properties of Performance Bronze far exceed traditional plumbing alloys containing lead.

In 2009, NIBCO launched HydraPure® Performance Bronze® products to form a new generation of lead-free valves, fittings and flanges that comply with changing plumbing requirements.

COMPETITIVE ADVANTAGE

Unsurpassed experience, research, development, testing and production of lead-free alloys have given NIBCO the advantage to develop products with proven mechanical strength and corrosion resistance.

HISTORICAL PERSPECTIVE

NIBCO originally used copper-bismuth alloy C89844 in its first generation of HydraPure® lead-free products. Introduced in 1992, this lead-free alloy brought NIBCO to the forefront of the industry as the first domestic producer of lead-free plumbing products. Many plumbing valve and fitting manufacturers still use similar alloys today.

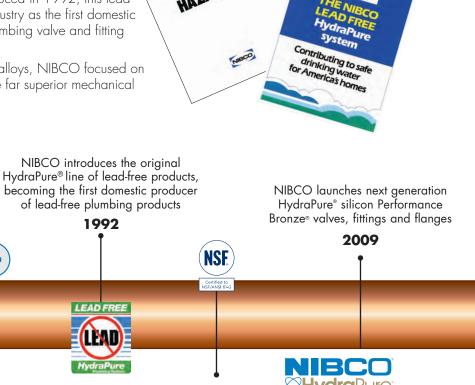
To overcome technical limitations of bismuth-based alloys, NIBCO focused on the development of silicon lead-free alloys that have far superior mechanical properties.

EPA mandates

elimination of lead in

plumbing solders

1986



1974

Congress passes the Safe Drinking Water Act

The L.C.C.A. defines "lead-free" as "plumbing components that may contain up to 8% lead."

1988

Annex G is added to NSF/ANSI 61

2008

WHY SILICON LEAD FREE ALLOYS?



BASIC PHYSICAL PROPERTIES

HydraPure® silicon Performance Bronze® exhibits mechanical properties that far exceed traditional plumbing alloys containing lead, especially when temperature is applied. NIBCO provides a series of white papers detailing engineering properties and performance characteristics of lead-free products on its website, nibcoleadfree.com.

CORROSION RESISTANCE

Silicon improves corrosion resistance of copper alloys, creating a largely impenetrable surface oxide barrier to corrosion attack. NIBCO uses third-party agencies to test its HydraPure® silicon Performance Bronze® products for stress corrosion cracking and dezincification corrosion. Data presented confirms performance of actual products produced from the alloys, not theoretical. Letters available at nibcoleadfree.com.

THIRD-PARTY REASSURANCE

NIBCO® HydraPure® valve products have achieved the highest level of stringent testing (Commercial Hot 180°F) within the NSF/ANSI 61-8 drinking water standard. In addition, HydraPure products are listed to NSF/ANSI 372; Weighted Average Lead Content of Water Contact Components that satisfies new requirements of the Safe Drinking Water Act.

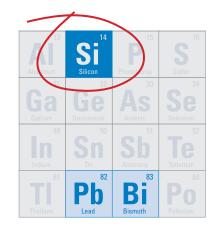


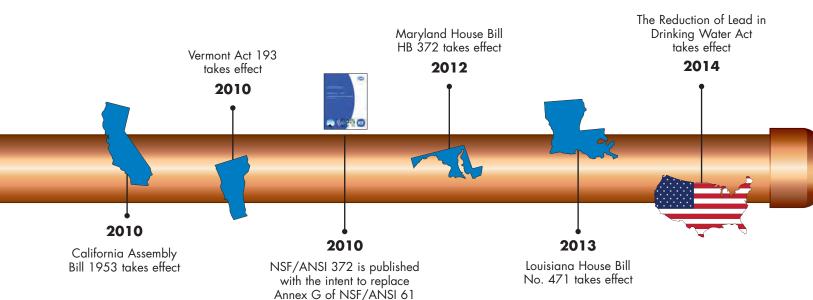
MELTING TEMPERATURE

Elemental silicon melts at 2,572°F. The melting point of silicon is not a factor with respect to alloy application and service as it maintains mechanical strength at elevated temperatures. The melting temperature of bismuth is 520.7°F, which is significantly lower than the melt point for lead, 621.5°F. The lower melt point of bismuth can have a reduction of mechanical strength with soldering, brazing and/or service exposure.

SOURCE OF SUPPLY

Silicon is the second most abundant element within the earth's crust, second only to oxygen. In contrast, the U.S. has no bismuth deposits. Bismuth is only about twice as abundant as gold and is extracted from the earth's crust primarily as a byproduct of lead mining.





Lead-Free Commercial Valves Illustrated Index



NIBCO

◎ T/S-585HP-LF

Two-piece lead-free ball valve Full Port, 1,000 PSI CWP Threaded or solder ends Reversible handle, triple-sealed stem Sizes 1/4"*, 3/8"*, 1/2" thru 4"



PC-585HP-LF

Two-piece lead-free ball valve Full Port, 250 PSI CWP Copper press ends w/ leak detection Reversible handle, triple-sealed stem Sizes 1/2" thru 4"

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TPC-585HP-LF

Two-piece lead-free ball valve Full Port, 1,000 PSI CWP Threaded x press ends Reversible handle, triple-sealed stem Sizes 1/2" thru 2"

Page 13



S-585HP-LF-HC

Two-piece lead-free ball valve w/hose cap Full Port, 1,000 PSI CWP Solder end, stainless trim Reversible handle, triple-sealed stem Sizes 1/2" and 3/4"

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T/S-585-80/66-LF

Two-piece lead-free ball valve Full port, 600 PSI CWP Threaded or solder ends Sizes 1/4" thru 3"

Page 17, 18



TPC-585-80/66-LF

Lead-free ball valve Full port, 250 PSI CWP Threaded x press ends Sizes 1/2" thru 2"

Page 21, 22



T/S-585-80/66-LF-HC

Two-piece lead-free ball valve w/hose cap Full Port, 600 PSI CWP Sizes 1/2" and 3/4" threaded or solder End w/ 3/4" hose connection

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€ T-585-80/66-LF-SR

Lead-free bronze ball valve Spring return-to-close handle (stainless steel) Threaded, full port, 600 psi CWP Sizes 1/4" thru 2"

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LEAD-FREE: Weighted average lead content ≤ 0.25%



T/S-585HP-66-LF

Two-piece lead-free ball valve Full Port, 1,000 PSI CWP Threaded or solder ends, stainless trim Reversible handle, triple-sealed stem Sizes 1/4"*, 3/8"*, 1/2" thru 4"

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PC-585HP-66-LF

Two-piece lead-free ball valve Full Port, 250 PSI CWP Copper press ends w/ leak detection, stainless trim Reversible handle, triple-sealed stem Sizes 1/2" thru 4"

Page 12



T-585HP-LF-HC

Two-piece lead-free ball valve w/hose cap Full Port, 1,000 PSI CWP Threaded end, stainless trim Reversible handle, triple-sealed stem Sizes 1/2" and 3/4"

Page 14



PC-585HP-LF-HC

Two-piece lead-free ball valve w/hose cap Full Port, 250 PSI CWP Copper press end w/ leak detection, stainless trim Reversible handle, triple-sealed stem Sizes 1/2" thru 3/4"

Page 16



PC-585-80/66-LF

Two-piece lead-free ball valve Full port, 250 PSI CWP Copper press ends Sizes 1/2" thru 3"

Page 19, 20



T/S-580-80/66-LF

Two-piece lead-free ball valve Conventional port, 600 PSI CWP Threaded or solder ends Sizes 1-1/4" thru 3"

Page 23, 24



PC-585-80/66-LF-HC

Two-piece lead-free ball valve w/hose cap Full port, 250 PSI CWP Sizes 1/2" and 3/4" press end w/ 3/4" hose connection

Page 27, 28



€ T-585-80-LF-HC-SR

Lead-free bronze ball valve Spring return-to-close handle (stainless steel) Threaded x hose, full port, 600 psi CWP Sizes 1/2" thru 3/4"

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*Threaded Only

Lead-Free Plumbing Valves Illustrated Index



NIBCO

PC-585-80-LF-SR

Lead-free bronze ball valve Spring return-to-close handle (stainless steel) Press, full port, 250 psi CWP Sizes 1/2" thru 2"

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T/S-595-Y-LF or T/S-595-Y-66-LF

Three-piece lead-free ball valve Full port, 600 PSI CWP Threaded or solder ends Sizes 1/4" thru 2-1/2"



PC-585-80-LF-HC-SR

Lead-free bronze ball valve Spring return-to-close handle (stainless steel) Press x hose, full port, 250 psi CWP Sizes 1/2" thru 3/4"

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PC-595-Y/R-LF or PC-595-Y/R-66-LF

Three-piece lead-free ball valve Full port. 250 psi CWP Press end leak detection Sizes 1/2" thru 2-1/2"

Page 36, 37



PC-111/113-LF

Lead-free gate valve Rising stem (111), Non-rising stem (113) 250† PSI CWP Copper press ends Sizes 1/2" thru 3"

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T/S-111/113-LF

Lead-free gate valve Rising stem (111), Non-rising stem (113) 300 PSI CWP Threaded or solder ends Sizes 1/4" thru 3"

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T/S-413-Y-LF

Lead-free horizontal swing check valve 200 PSI CWP Threaded or solder ends Sizes 1/4" thru 2"

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PC-413-Y-LF

Lead-free horizontal swing check valve 200 PSI CWP Copper Press Ends Sizes 1/2" thru 2"

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T/S-480-Y-LF, PC-480-Y/W-LF

Lead-free ring check® valve 250 PSI CWP Threaded or solder or press ends Sizes 1/2" thru 2"

Page 44, 45



T/S-FP-600A-LF and T/S-FP-600-AD-LF

Two-piece lead-free Ball Valve Full port 600 PSI CWP (1/4" - 2") 400 PSI CWP (21/2" - 4") Threaded sizes 1/4" thru 4" Solder sizes 3/8" thru 3"

Pages 46-48



PC-FP-600A-LF

Press x press female end Full port, blowout-proof stem Press end leak detection 250 / 200 PSI CWP Size 1/2" thru 4"

Page 49-50



PC-FP-600A-LF-W

Press end leak detection Two-piece lead-free ball valve Full port, 250 PSI CWP Wing handle Sizes 1/2" thru 1"

Pages 51



PC-FP-600A-S-LF

Press slip Press ends leak detection Two-piece lead-free ball valve Full port, 250 PSI CWP Sizes 1/2" thru 1"

Pages 52



PC-FP-485-LF

Ball and inline check valve combined Press ends leak detection Two-piece lead-free ball valve Full port, 250 PSI CWP Sizes 1/2" thru 11/2"

Pages 53



PCMT-FP-600A-LF

Press end leak detection Two-piece lead-free ball valve Full port, 250 PSI CWP MIP union Sizes 1/2" thru 1"

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Lead-Free Plumbing Valves Illustrated Index, cont.



PCT-FP-600A-LF

Press end leak detection Two-piece lead-free ball valve Full port, 250 PSI CWP FIP union Sizes 1/2" thru 1"



PC-FP-600A-D-LF

Press end leak detection Two-piece lead-free ball valve Full port, 250 PSI CWP Side drain / bleeder Sizes 1/2" thru 1" Pages 56



PC-FP-600A-LF-HC

Press end leak detection Two-piece lead-free ball valve Full port, 250 PSI CWP 3/4" Hose connection with cap Sizes 1/2" thru 3/4"

Pages 57



PCPXA-FP-600A-LF

Press end leak detection Two-piece lead-free ball valve Full port, 250 PSI CWP PEX end F1960 cold expansion Sizes 1/2" thru 2"

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PCPX-FP-600A-LF

Press end leak detection Two-piece lead-free ball valve Full port, 250 PSI CWP PEX end F1807 crimp Sizes 1/2" thru 2"

Pages 59



PCU-FP-600A-LF

Press end leak detection Two-piece lead-free ball valve Full port, 250 PSI CWP Presss x Press Union Sizes 1/2" thru 1"

Pages 60



PCFU-FP-600A-LF

Press end leak detection Two-piece lead-free ball valve Full port, 250 PSI CWP FIP union Sizes 1/2" thru 1"

Pages 61



PCMU-FP-600A-LF

Press end leak detection Two-piece lead-free ball valve Full port, 250 PSI CWP MIP union Sizes 1/2" thru 1"

Pages 62



PCSU-FP-600A-LF

Press end leak detection Two-piece lead-free ball valve Full port, 250 PSI CWP Solder union Sizes 1/2" thru 1"

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T/S-685-80/66-LF S-685-80-D-LF

Two-piece lead-free ball valve Full port, 600 PSI CWP Threaded/Solder ends, Sizes 1/4" thru 2" Solder with drain (-D), Sizes 1/2" thru 1"

Pages 64-66



726-LF/76-LF

Lead-free stop and drain valves 125 PSI CWP Threaded or solder ends Sizes 1/2" and 3/4"

Page 67



Supply Stops

Quarter-turn Straight or angle style 125 PSI CWP Various end connections Sizes 1/2" thru 5/8"

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Identification of Lead-Free Bronze/Brass Valves

Markings and Packaging



NIBCO® HydraPure® valves can be identified by the double oval symbol and "Si" – indicative of silicon Performance Bronze® – cast in the body of the valve.



Lead-Free valves <u>not</u> manufactured from Performance Bronze® include an "LF" in the body





Blue Carton Labels

White Handles







Features: Silicon Performance Bronze® Alloy • Laser-Welded Cast Body • Triple-Sealed Stem • Reversible Handle • Easily Adjustable Packing Nut • Blowout-Proof Stem

Approvals: MSS-SP110/145 ● IAPMO/ANSI Z1157 ● ASME A112.4.14/CSA B125.14 ● NSF/ANSI/CAN 61/372-8 Commercial Hot 180° F • ICC-ES PMG

Size range: 1/4" - 4"

T-585HP-LF

Pressure / temperature ratings:

- T-585HP: (1/4"-2") 1,000 psi non-shock cold working pressure
- T-585HP: (2 ½"-4") 600 psi non-shock cold working pressure
- S-585HP (½"-1"): 1,000 psi non-shock cold working pressure
 S-585HP (1¼"-2"): 850 psi non-shock cold working pressure
- S-585HP (2 1/2"): 600 psi non-shock cold working pressure

150 saturated steam working pressure*

United States Patent No. 10.234.043 & **United States Patent** No. 11.131.403





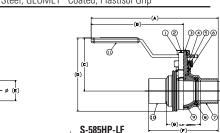




Lead-free markings: Double oval in body casting, white handle and blue hand tag

MATERIAL LIST

	PART	SPECIFICATION
1.	Handle Nut	Carbon Steel, GEOMET® Coated
2.	Handle Stop	ASTM A276 S31600 Stainless Steel
3.	Stem	ASTM C69300 Lead-free Silicon Bronze
4.	Packing	PTFE
5.	Packing Nut	ASTM B16 C36000 Brass
6.	Stem 0-ring (2)	Qmonix® EPDM
7.	Body	ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting
8.	Seats (2)	Reinforced PTFE
9.	Ball	ASTM B584 C46500 DZR Lead-free Brass (¼" - 1") ASTM A276 S31600 or A351 CF8M Stainless Steel (1¼" -4")
10.	Body End Piece	ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting
11.	Handle	Carbon Steel, GEOMET® Coated, Plastisol Grip



DIMENSIONS - WEIGHTS

T-585HP-LF Threaded S-585HP-LF

585HP-66-LF with stainless steel trim also available.

Handle Options:

- NIB-Seal® (1/4"-2")
- Locking Lever
 - Stainless Steel
- Extended Lever w/ Memory Stop

	S-585	HP-LF	T-585	HP-LF					S-585	HP-LF	T-585	HP-LF			S-585	HP-LF	T-585I	HP-LF	S-585	HP-LF		Wei	ghts	
Size	P			1		3		<u> </u>))		<u> </u>		F	F			ì	S-585	HP-LF	T-5851	HP-LF
In.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	lbs.	kg	lbs.	kg
1/4"	-	-	4.98	-	4.04	102	1.99	50	-	-	2.65	67	0.39	10	-	-	1.87	47	-	-	-	-	0.64	0.29
.39"	-	-	4.98	-	4.04	102	1.99	50	-	-	3.17	81	0.39	10	-	-	1.87	47	-	-	-	-	1.16	0.53
1/2"	5.02	128	5.11	130	4.04	103	2.03	52	2.56	65	2.65	67	0.50	13	1.92	49	2.14	54	0.94	24	0.50	0.23	0.64	0.29
3/4"	5.65	143	5.52	140	4.18	106	2.31	59	3.08	78	3.17	81	0.75	19	2.93	74	2.66	68	1.43	36	0.91	0.41	1.16	0.53
1"	6.55	166	6.30	160	4.75	121	2.74	70	3.70	94	3.78	96	1.00	25	3.58	91	3.09	78	1.76	45	1.23	0.56	1.53	0.69
1¼"	7.04	179	6.75	171	5.06	129	2.92	74	4.03	102	4.03	102	1.25	32	3.96	101	3.38	86	2.02	51	1.92	0.87	2.25	1.02
1½"	9.05	230	8.65	220	6.75	171	3.22	82	4.56	116	4.56	116	1.50	38	4.61	117	3.79	96	2.43	62	2.84	1.29	3.19	1.45
2"	9.93	252	9.29	236	7.12	181	3.68	93	5.40	137	5.45	138	2.00	51	5.62	143	4.34	110	2.94	75	3.91	1.77	4.00	1.81
2.5"	15.64	397	15.12	384	12.06	306	4.41	112	6.62	168	6.62	168	2.50	633	7.15	181	6.12	155	4.21	107	12.75	5.78	13.60	6.17
3"	-	-	15.30	388	12.06	306	4.71	119	-	-	7.26	184	3.00	76.2	-	-	6.48	164	-	-	-	-	14.08	6.39
4"		-	16.01	406	12.06	306	5.52	140	-	-	8.88	225	4.00	101	-	-	7.89	200	-	-	-	-	23.24	10.54

^{*}Maximum working pressure/temperature ratings for solder-end valves per ASME B16.18 Table A-1. Published ratings require use of 95-5 tin-antimony solder when assembling joints. *NIBCO recommends SS Ball for Hot Water and Steam applications.

GEOMET® is a registered trademark of NOF Metal Coatings, Inc and QMONIX® is a trademark of Quadion LLC.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

LEAD-FREE: Weighted average lead content ≤ 0.25%





Features: Silicon Performance Bronze® Alloy • Laser-Welded Cast Body • Triple-Sealed Stem • Reversible Handle • Easily Adjustable Packing Nut • Blowout-Proof Stem • Stainless Trim

Approvals: MSS-SP110/145 ● IAPMO/ANSI Z1157 ● ASME A112.4.14/CSA B125.14 ● NSF/ANSI/CAN 61/372-8 Commercial Hot 180° F • ICC-ES PMG

Size range: 1/4" - 4"

Pressure / temperature ratings:

- T-585HP (1/4"-2"): 1,000 psi non-shock cold working pressure
- T-585HP (2½"-4"): 600 psi non-shock cold working pressure
- S-585HP (1/2"-1"): 1,000 psi non-shock cold working pressure
- S-585HP (1¼"-2"): 850 psi non-shock cold working pressure
 S-585HP (2½"): 600 psi non-shock cold working pressure

• 150 saturated steam working pressure*

No. 10,234,043 & **United States Patent** No. 11.131.403

United States Patent







T-585HP-66-LF

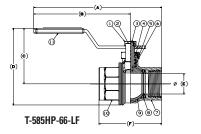


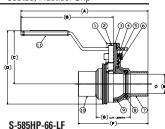
S-585HP-66-LF

Lead-free markings: Double oval in body casting, white handle and blue hang tag

MATERIAL LIST

	PART	SPECIFICATION
1.	Handle Nut	Carbon Steel, GEOMET® Coated
2.	Handle Stop	ASTM A276 S31600 Stainless Steel
3.	Stem	ASTM A276 S31600 Stainless Steel
4.	Packing	PTFE
5.	Packing Nut	ASTM B16 C36000 Brass
6.	Stem 0-ring (2)	Qmonix® EPDM
7.	Body	ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting
8.	Seats (2)	Reinforced PTFE
9.	Ball	ASTM A276 S31600 or A351 CF8M Stainless Steel
10.	Body End Piece	ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting
11.	Handle	Carbon Steel, GEOMET® Coated, Plastisol Grip





DIMENSIONS - WEIGHTS

Handle Options:

- NIB-Seal® (1/4"-2")
- Locking Lever
- Stainless Steel
- Extended Lever w/ Memory Stop

	S-585H	P-66-LF	T-585H	P-66-LF					S-585H	IP-66-LF	T-585HI	P-66-LF			S-585H	P-66-LF	T-585H	P-66-LF	S-585H	IP-66-LF		Wei	ghts	
Size		4		4		3	(;		D)		<u> </u>		F		F		G	S-585H	P-66-LF	T-585H	P-66-LF
In.	ln.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	lbs.	kg	lbs.	kg
1/4"	-	-	4.98	-	4.04	102	1.99	50	-	-	2.65	67	0.39	10	-	-	1.87	47	-	-	-	-	0.64	0.29
.39"	-	-	4.98	-	4.04	102	1.99	50	-	-	3.17	81	0.39	10	-	-	1.87	47	-	-	-	-	1.16	0.53
1/2"	5.02	128	5.11	130	4.04	103	2.03	52	2.56	65	2.65	67	0.50	13	1.92	49	2.14	54	0.94	24	0.50	0.23	0.64	0.29
3/4"	5.65	143	5.52	140	4.18	106	2.31	59	3.08	78	3.17	81	0.75	19	2.93	74	2.66	68	1.43	36	0.91	0.41	1.16	0.53
1"	6.55	166	6.30	160	4.75	121	2.74	70	3.70	94	3.78	96	1.00	25	3.58	91	3.09	78	1.76	45	1.23	0.56	1.53	0.69
11/4"	7.04	179	6.75	171	5.06	129	2.92	74	4.03	102	4.03	102	1.25	32	3.96	101	3.38	86	2.02	51	1.92	0.87	2.25	1.02
1½"	9.05	230	8.65	220	6.75	171	3.22	82	4.56	116	4.56	116	1.50	38	4.61	117	3.79	96	2.43	62	2.84	1.29	3.19	1.45
2"	9.93	252	9.29	236	7.12	181	3.68	93	5.40	137	5.45	138	2.00	51	5.62	143	4.34	110	2.94	75	3.91	1.77	4.00	1.81
2.5"	15.64	397	15.12	384	12.06	306	4.41	112	6.62	168	6.62	168	2.50	633	7.15	181	6.12	155	4.21	107	12.75	5.78	13.60	6.17
3"	-	-	15.30	388	12.06	306	4.71	119	-	-	7.26	184	3.00	76.2	-	-	6.48	164	-	-	-	-	14.08	6.39
4"	-	-	16.01	406	12.06	306	5.52	140	-	-	8.88	225	4.00	101	-	-	7.89	200	-	-	-	-	23.24	10.54

^{*}Maximum working pressure/temperature ratings for solder-end valves per ASME B16.18 Table A-1. Published ratings require use of 95-5 tin-antimony solder when assembling joints.

GEOMET® is a registered trademark of NOF Metal Coatings, Inc, and QMONIX® is a trademark of Quadion LLC.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

LEAD-FREE: Weighted average lead content ≤ 0.25%

^{*}NIBCO recommends SS Ball for Hot Water and Steam applications.





Features: Silicon Performance Bronze® Alloy • Laser-Welded Cast Body • Triple-Sealed Stem • Reversible Handle • Easily Adjustable Packing Nut • Blowout-Proof Stem • Press Ends Leak Detection

Approvals: MSS-SP110/145 • IAPMO/ANSI Z1157 • ASME A112.4.14/CSA B125.14 • NSF/ANSI/CAN 61/372-8 Commercial Hot 180° F • ICC-ES PMG

Pressure/Temperature Rating:

PC-585HP (1/2"-2"): 250 psi non-shock cold working pressure* PC-585HP (21/2"-4"): 200 psi non-shock cold working pressure* Maximum pressure/temperature: 225 psi at 250° F* (1/2"-2") 200 psi at 250° F* (21/2"-4")

United States Patent No. 10,234,043 & **United States Patent** No. 11,131,403









Lead-free markings: Double oval in body casting, white handle and blue hang tag

MATERIAL LIST

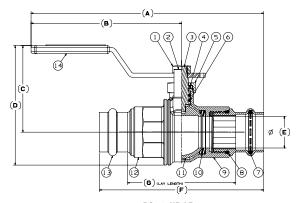
	PART	SPECIFICATION
1.	Handle Nut	Carbon Steel, GEOMET® Coated
2.	Handle Stop	ASTM A276 S31600 Stainless Steel
3.	Stem	ASTM C69300 Lead-free Silicon Bronze
4.	Packing	PTFE
5.	Packing Nut	ASTM B16 C36000 Brass
6.	Stem 0-ring (2)	Qmonix® EPDM
7.	O-ring (2)	EPDM - Leak Detection
8.	Boss Seal O-ring (2)	EPDM
9.	Body	ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting
10.	Seats (2)	Reinforced PTFE
11.	Ball	ASTM B584 C46500 DZR Lead-free Brass (½" - 1") ASTM A276 S31600 or A351 CF8M Stainless Steel (1¼" -4")
12.	Body End Piece	ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting
13.	Press End Adapter (2)	ASTM B75 Alloy C12200 Wrot Copper
14.	Handle	Carbon Steel, GEOMET® Coated, Plastisol Grip

Handle Options:

- NIB-Seal® (1/4"-2")
- Locking Lever
- Stainless Steel
- Extended Lever w/ Memory Stop



PC-585HP-66-LF with stainless steel trim also available.



PC-585HP-LF

DIMENSIONS - WEIGHTS

Size	Size A			B		C		D		E		<u> </u>	G		Weights	
In.	ln.	mm.	In.	mm.	ln.	mm.	In.	mm.	ln.	mm.	ln.	mm.	In.	mm.	lbs.	kg
1/2"	5.93	151	4.04	103	2.03	52	2.66	68	0.50	13	3.77	96	2.37	60	0.80	0.36
3/4"	6.65	169	4.18	106	2.31	59	3.17	81	0.75	19	4.93	125	3.01	76	1.21	0.55
1″	7.35	187	4.75	121	2.74	70	3.78	96	1.00	25	5.19	132	3.42	87	1.58	0.72
1¼"	7.95	202	5.06	129	2.92	74	4.12	105	1.25	32	5.78	147	3.76	96	2.27	1.03
1½"	10.25	260	6.75	171	3.22	82	4.64	118	1.50	38	7.01	178	4.24	108	3.55	1.61
2"	11.03	280	7.12	181	3.68	93	5.46	139	2.00	51	7.80	198	4.78	121	6.26	2.84
2.5"	16.86	428	12.06	306	4.41	112	6.62	168	2.50	63	9.61	244	6.67	169	14.80	6.71
3"	17.31	439	12.06	306	4.71	119	7.26	184	3.00	76	10.51	267	7.19	182	17.13	7.77
4"	18.60	472	12.06	306	5.52	140	8.88	225	4.00	101	13.08	332	8.76	222	28.45	12.90

*NIBCO® Press System ball valves are designed to meet MSS SP-110 with the exception of the end connection. Ball valves are down-rated from T-585HP rated CWP to the specified rating above to match the Press System. GEOMET® is a registered trademark of NOF Metal Coatings, Inc. QMONIX® is a trademark of Quadion LLC

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to

cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov. LEAD-FREE: Weighted average lead content ≤ 0.25%





Features: Silicon Performance Bronze® Alloy • Laser-Welded Cast Body • Triple-Sealed Stem • Stainless Trim • Reversible Handle • Easily Adjustable Packing Nut • Blowout-Proof Stem • Press Ends Leak Detection

Approvals: MSS-SP110/145 • IAPMO/ANSI Z1157 • ASME A112.4.14/CSA B125.14 • NSF/ANSI/CAN 61/372-8 Commercial Hot 180° F • ICC-ES PMG

Pressure/Temperature Rating:

PC-585HP (1/2"-2"): 250 psi non-shock cold working pressure* PC-585HP (21/2"-4"): 200 psi non-shock cold working pressure* Maximum pressure/temperature: 225 psi at 250° F* (1/2"-2") 200 psi at 250° F* (2½"-4")

United States Patent No. 10,234,043 & **United States Patent** No. 11,131,403







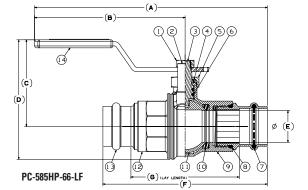


Lead-free markings: Double oval in body casting, white handle and blue hang tag

MATERIAL LIST

	PART	SPECIFICATION
1.	Handle Nut	Carbon Steel, GEOMET® Coated
2.	Handle Stop	ASTM A276 S31600 Stainless Steel
3.	Stem	ASTM A276 S31600 Stainless Steel
4.	Packing	PTFE
5.	Packing Nut	ASTM B16 C36000 Brass
6.	Stem O-ring (2)	Qmonix® EPDM
7.	0-ring (2)	EPDM - Leak Detection
8.	Boss Seal O-ring (2)	EPDM
9.	Body	ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting
10.	Seats (2)	Reinforced PTFE
11.	Ball	ASTM A276 S31600 or A351 CF8M Stainless Steel
12.	Body End Piece	ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting
13.	Press End Adapter (2)	ASTM B75 Alloy C12200 Wrot Copper
14.	Handle	Carbon Steel, GEOMET® Coated, Plastisol Grip





Handle Options:

- NIB-Seal® (1/4"-2")
- Locking Lever
- Stainless Steel
- Extended Lever w/ Memory Stop

DIMENSIONS - WEIGHTS

Size	ze A		A B		C		D		<u>E</u>		. <u> </u>		G		Weights	
In.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	lbs.	kg
1/2"	5.93	151	4.04	103	2.03	52	2.66	68	0.50	13	3.77	96	2.37	60	0.80	0.36
3/4"	6.65	169	4.18	106	2.31	59	3.17	81	0.75	19	4.93	125	3.01	76	1.21	0.55
1"	7.35	187	4.75	121	2.74	70	3.78	96	1.00	25	5.19	132	3.42	87	1.58	0.72
1¼"	7.95	202	5.06	129	2.92	74	4.12	105	1.25	32	5.78	147	3.76	96	2.27	1.03
1½"	10.25	260	6.75	171	3.22	82	4.64	118	1.50	38	7.01	178	4.24	108	3.55	1.61
2"	11.03	280	7.12	181	3.68	93	5.46	139	2.00	51	7.80	198	4.78	121	6.26	2.84
2.5"	16.86	428	12.06	306	4.41	112	6.62	168	2.50	63	9.61	244	6.67	169	14.80	6.71
3"	17.31	439	12.06	306	4.71	119	7.26	184	3.00	76	10.51	267	7.19	182	17.13	7.77
4"	18.60	472	12.06	306	5.52	140	8.88	225	4.00	101	13.08	332	8.76	222	28.45	12.90

*NIBCO® Press System ball valves are designed to meet MSS SP-110 with the exception of the end connection. Ball valves are down-rated from T-585HP rated CWP to the specified rating above to match the Press System. **GEOMET®** is a registered trademark of NOF Metal Coatings, Inc. QMONIX® is a trademark of Quadion LLC

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov. LEAD-FREE: Weighted average lead content ≤ 0.25%



IAPMO/ANSI Z1157

ASME A112.4.14

United States Patent No. 10,234,043 &

United States Patent

No. 11.131.403

NSF/ANSI/CAN 61 & 372



NIBCO® 585HP Lead-Free Bronze Ball Valves

Features: Silicon Performance Bronze® Alloy • Laser-Welded Cast Body • Triple-Sealed Stem • Reversible Handle • Easily Adjustable Packing Nut • Blowout-Proof Stem • Press Ends Leak Detection

Approvals: MSS-SP110/145 ● IAPMO/ANSI Z1157 ● ASME A112.4.14/CSA B125.14 ● NSF/ANSI/CAN 61/372-8 Commercial Hot 180° F • ICC-ES PMG

Size range: 1/2" - 2"

Pressure rating: 250 psi non-shock cold working pressure*

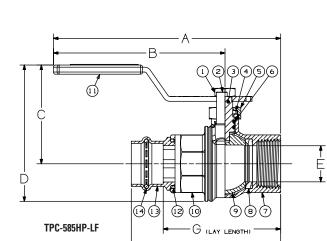
Body design pressure: 1,000 psi non-shock cold working pressure

Maximum pressure / temperature: 225 psi at 250° F*

Lead-free markings: Double oval in body casting, white handle and blue hang tag



TPC-585HP-66-LF with stainless steel trim also available.



MATERIAI LIST

		MAILMALLIOI
	PART	SPECIFICATION
1.	Handle Nut	Carbon Steel, GEOMET® Coated
2.	Handle Stop	ASTM A276 S31600 Stainless Steel
3	Stem	ASTM C69300 Lead-free Silicon Bronze
٥.	Stelli	ASTM A276 316 Stainless Steel
4.	Packing	PTFE
5.	Packing Nut	ASTM B16 C36000 Brass
6.	Stem O-ring (2)	Qmonix® EPDM
7.	O-ring (2)	EPDM - Leak Detection
8.	Boss Seal O-ring (2)	EPDM
9.	Body	ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting
_10.	Seats (2)	Reinforced PTFE
11.	Ball	ASTM B584 C46500 DZR Lead-free Brass (½" - 1") ASTM A276 or A351 CF8M Stainless Steel (1½" -2")
12.	Body End Piece	ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting
13.	Press End Adapter (2)	ASTM B75 Alloy C12200 Wrot Copper
14	Handle	Carbon Steel GEOMET® Coated Plastisol Grip

Handle Options:

- NIB-Seal®
- Locking Lever
- Extended Lever w/ Memory Stop

DIMENSIONS - WEIGHTS

Size		A B		(D		E		F		G	Weights		
In.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	lbs.	kg
1/2"	5.11	129.8	4.04	102.6	2.03	51.6	2.65	67.3	0.50	12.7	3.08	78.2	2.39	60.7	0.740	0.336
3/4"	5.52	140.2	4.18	106.2	2.31	58.7	3.20	81.3	0.75	19.1	3.93	99.8	2.97	75.4	1.293	0.586
1"	6.30	160.0	4.75	120.7	2.74	69.6	3.80	96.5	1.00	25.4	4.27	108.5	3.38	85.9	1.761	0.799
1¼"	6.75	171.5	5.06	128.5	2.92	74.2	4.15	105.4	1.25	31.8	4.71	119.6	3.70	94.0	2.714	1.231
1½"	8.65	219.7	6.75	171.5	3.22	81.8	4.65	118.1	1.50	38.1	5.53	140.5	4.15	105.4	3.903	1.770
2"	9.29	236.0	7.12	180.8	3.68	93.5	5.45	138.4	2.00	50.8	6.20	157.5	4.69	119.1	5.893	2.673

*NIBCO® Press System ball valves are designed to meet MSS SP-110 with the exception of the end connection. Ball valves are down-rated from 1000 psi CWP to 250 psi CWP to match the Press System.

GEOMET® is a registered trademark of NOF Metal Coatings, Inc. QMONIX® is a trademark of Quadion LLC

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

LEAD-FREE: Weighted average lead content ≤ 0.25%





Features: Silicon Performance Bronze® Alloy • Laser-Welded Cast Body • Triple-Sealed Stem • Reversible Handle • Easily Adjustable Packing Nut • Blowout-Proof Stem • Hose Cap and Chain

Approvals: MSS-SP110/145 • IAPMO/ANSI Z1157 • ASME A112.4.14/CSA B125.14 • NSF/ANSI/CAN 61/372-8 Commercial Hot 180° F • ICC-ES PMG

Size range: ½", ¾"

Pressure rating: 1000 psi non-shock cold working pressure

Lead-free markings: Double oval in body casting, white handle and blue hang tag

United States Patent No. 10,234,043 & **United States Patent** No. 11.131.403











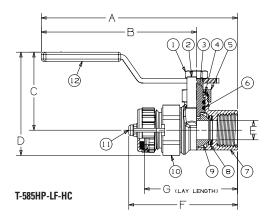


MATERIAL LIST

		MAILMALLOI
	PART	SPECIFICATION
1.	Handle Nut	Carbon Steel, GEOMET® Coated
2.	Handle Stop	ASTM A276 S31600 Stainless Steel
3	Ctom	ASTM B371 DZR Lead-free Silicon Brass
٥.	Stem	ASTM A276 316 Stainless Steel
4.	Packing	PTFE
5.	Packing Nut	ASTM B16 C36000 Brass
6.	Stem 0-ring (2)	Qmonix® EPDM
7.	Body	ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting
8.	Seats (2)	Reinforced PTFE
9	Ball	ASTM B584 C46500 DZR Lead-free Brass
9.	DdII	ASTM A276 or A351 CF8M Stainless Steel
10.	Body End Piece	ASTM B371 C69300 DZR Lead-free Silicon Brass
11.	Hose Cap Assembly	HPB58-3 Brass
12.	Handle	Carbon Steel, GEOMET® Coated, Plastisol Grip



T-585HP-66-LF-HC with stainless steel trim also available.



DIMENSIONS - WEIGHTS

	Size		<u>A</u>		В		С		D		<u> </u>		F		G	Weights		
	In.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	lbs.	kg	
Ī	1/2"	5.11	129.79	4.04	102.62	2.03	51.56	2.69	68.33	0.50	12.70	2.83	71.88	2.43	61.72	0.643	0.292	
	3/4"	5 52	140 21	4 18	106 17	2.31	58 67	3 18	80 77	0.75	19 05	3 13	79 50	2 72	69 09	1 062	0.482	

Note: Cap is for hose end thread protection only. Not to be used for pressure containing purposes.



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.







Features: Silicon Performance Bronze® Alloy • Laser-Welded Cast Body • Triple-Sealed Stem • Reversible Handle • Easily Adjustable Packing Nut • Blowout-Proof Stem • Hose Cap and Chain

Approvals: MSS-SP110/145 • IAPMO/ANSI Z1157 • ASME A112.4.14/CSA B125.14 • NSF/ANSI/CAN 61/372-8 Commercial Hot 180° F • ICC-ES PMG

Size range: 1/2", 3/4"

Pressure rating: 1000 psi non-shock cold working pressure

Lead-free markings: Double oval in body casting, white handle and blue hang tag

United States Patent No. 10,234,043 & **United States Patent** No. 11.131.403







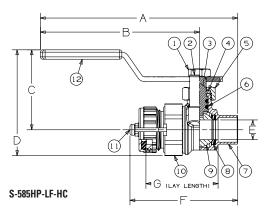


MATERIAI LIST

		MAI EMAE EIOT
	PART	SPECIFICATION
1.	Handle Nut	Carbon Steel, GEOMET® Coated
2.	Handle Stop	ASTM A276 S31600 Stainless Steel
3	Stem	ASTM B371 C69300 Lead-free Silicon Bronze
٥.	Stelli	ASTM A276 316 Stainless Steel
4.	Packing	PTFE
5.	Packing Nut	ASTM B16 C36000 Brass
6.	Stem O-ring (2)	Qmonix® EPDM
7.	Body	ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting
8.	Seats (2)	Reinforced PTFE
9	Ball	ASTM B584 C46500 DZR Lead-free Brass
9.	Ddll	ASTM A276 or A351 CF8M Stainless Steel
10.	Body End Piece	ASTM B371 C69300 DZR Lead-free Silicon Brass
11.	Hose Cap Assembly	HPB58-3 Brass
12.	Handle	Carbon Steel, GEOMET® Coated, Plastisol Grip



S-585HP-66-LF-HC with stainless steel trim also available



DIMENSIONS - WEIGHTS

Size	AB			C		D		<u> </u>		<u> </u>		G	Weights			
ln.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	lbs.	kg
1/2"	5.02	127.51	4.04	102.62	2.03	51.56	2.69	68.33	0.50	12.70	2.74	69.60	1.83	46.48	0.565	0.256
3/4"	5.65	143.51	4.18	106.17	2.31	58.67	3.18	80.77	0.75	19.05	3.26	82.80	2.11	53.59	0.945	0.429

Notes: 1. Cap is for hose end thread protection only. Not to be used for pressure containing purposes. 2. Solder end is designed to be soft soldered into lines using solder with the melting point not exceeding 500°F. Higher temperature solders will damage the seat material. See installation sheet packaged with valves.



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Features: Silicon Performance Bronze® Alloy • Laser-Welded Cast Body • Triple-Sealed Stem • Reversible Handle • Easily Adjustable Packing Nut • Blowout-Proof Stem • Hose Cap and Chain • Press Ends Leak Detection

Approvals: MSS-SP110/145 • IAPMO/ANSI Z1157 • ASME A112.4.14/CSA B125.14 • NSF/ANSI/CAN 61/372-8 Commercial Hot 180° F • ICC-ES PMG

Size range: 1/2", 3/4"

Pressure rating: 250 psi non-shock cold working pressure*

Body design pressure: 1,000 psi non-shock cold working pressure

Maximum pressure / temperature: 225 psi at 250° F*

United States Patent No. 10,234,043 & **United States Patent** No. 11.131.403













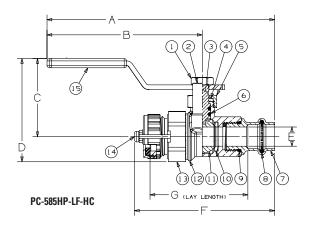
Lead-free markings: Double oval in body casting, white handle and blue hang tag

MATERIAL LIST

	PART	SPECIFICATION
1.	Handle Nut	Carbon Steel, GEOMET® Coated
2.	Handle Stop	ASTM A276 S31600 Stainless Steel
3	Ctom	ASTM C69300 DZR Lead-free Silicon Brass
٥.	Stem	ASTM A276 316 Stainless Steel
4.	Packing	PTFE
5.	Packing Nut	ASTM B16 C36000 Brass
6.	Stem 0-ring (2)	Qmonix® EPDM
7.	Press End Adapter	C12200 Wrought Copper
8.	Crimp Evident Seal	EPDM
9.	Press O-ring	EPDM
10.	Seats (2)	Reinforced PTFE
11.	Ball	ASTM B584 46500 DZR Lead-free Brass
11.	Ddll	ASTM A276 or A351 CF8M Stainless Steel
12.	Body	ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting
13.	Body End Piece	ASTM B371 C69300 DZR Lead-free Silicon Brass
14.	Hose Cap Assembly	HPB58-3 Brass
15.	Handle	Carbon Steel, GEOMET® Coated, Plastisol Grip



PC-585HP-66-LF-HC with stainless steel trim also available.



DIMENSIONS - WEIGHTS

Size		A B			C D				<u> </u>		F		G	Weights		
In.	In.	mm.	In.	mm.	In.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	lbs.	kg
1/2"	5.93	150.62	4.04	102.62	2.03	51.56	2.69	68.33	0.50	12.70	3.65	92.71	2.55	64.77	0.780	0.354
3/4"	6.65	168.91	4.18	106.17	2.31	58.67	3.18	80.77	0.75	19.05	4.26	108.20	2.89	73.41	1.112	0.504

Note: 1. Cap is for hose end thread protection only. Not to be used for pressure containing purposes.

*NIBCO® Press System ball valves are designed to meet MSS SP-110, with the exception of the end connection. Ball valves are downrated from 1000 psi CWP to 250 psi CWP to match the Press System. $\mbox{\bf GEOMET} \mbox{\it \ B}$ is a registered trademark of NOF Metal Coatings, Inc.

QMONIX® is a trademark of Quadion LLC

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AHEAD OF THE FLOW[®]



Lead-Free Bronze Ball Valves

Features: Silicon Performance Bronze[®] Alloy • Two-Piece Body • Full Port • Blowout-Proof Stem

Approvals: MSS-SP110/145 • IAPMO/ANSI Z1157 • ASME A112.4.14/CSA B125.14 •

NSF/ANSI/CAN 61/372-8 Commercial Hot 180° F • ICC-ES PMG

Size range: 1/4" - 3"

Pressure rating: 600 PSI non-shock cold working pressure Maximum pressure / temperature: 100 PSI at 300° F

Lead-free markings: Double oval in body casting, white handle and blue hang tag











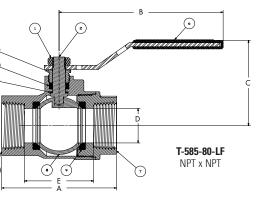
MATERIAL LIST

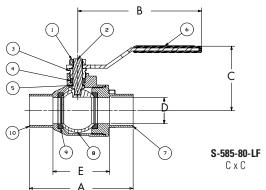
PART	•	SPECIFICATION
1.	Handle Nut	Zinc Plated Steel
2.	Stem	Silicon Bronze ASTM B371 Alloy C69300
3.	Pack Gland	Brass ASTM B16 Alloy C36000
4.	Packing, Stem	Virgin PTFE
5.	Washer, Thrust	Reinforced PTFE
6.	Handle	Zinc Plated Steel Clear Chromate Plastisol Coated
7.	End Piece	Silicon Bronze ASTM B584 Alloy C87600
8.	Seat Ring (2)	Reinforced PTFE
	Ball	DZR Brass SAE J461 C46500 (¼"-1")
9.	Dall	Stainless Steel ASTM A276 S31600 or ASTM A351CF8M (11/4"-3")
10.	Body	Silicon Bronze ASTM B584 Alloy C87600











DIMENSIONS—WEIGHTS—QUANTITIES

								Dime	nsion	s										
		T-585	-80-LF	S-585	-80-LF							T-585	-80-LF	S-585	-80-LF					
SI	ZE		1		Α		В	(<u> </u>		<u> </u>		<u> </u>		<u> </u>	T-585	-80-LF	S-585	-80-LF	Master
In.	mm.	In.	mm.	In.	mm.	ln.	mm.	In.	mm.	ln.	mm.	In.	mm.	ln.	mm.	Lbs.	Kg.	Lbs.	Kg.	Ctn. Qty.
1/4	8	1.78	45	1.83	46	3.96	101	1.86	47	0.31	8	1.00	25	1.21	31	0.43	0.19	0.40	0.18	24
3/8	10	1.79	45	1.97	50	3.96	101	1.85	47	0.38	10	1.80	46	1.21	31	0.44	0.20	0.41	0.19	24
1/2	15	2.23	57	2.4	61	3.96	101	1.96	50	0.5	13	1.16	29	1.40	36	0.65	0.30	0.56	0.25	80
3/4	20	2.78	71	3.16	80	4.76	121	2.28	58	0.75	19	1.68	43	1.66	42	1.20	0.55	1.02	0.46	60
1	25	3.34	85	3.99	101	4.76	121	2.48	63	1	25	2.00	51	2.17	55	1.63	0.74	1.50	0.68	40
11/4	32	3.75	95	4.13	105	6.75	171	3.10	79	1.25	32	2.39	61	2.19	56	2.87	1.30	2.41	1.09	20
1½	40	4.26	108	4.97	126	6.75	171	3.32	84	1.5	38	2.89	73	2.79	71	3.83	1.74	3.62	1.64	10
2	50	4.80	122	6.02	153	6.75	171	3.56	90	2	51	3.40	86	3.34	85	5.57	2.53	5.54	2.51	6
2½	65	6.00	152	7.21	183	8.06	205	4.40	112	2.50	64	4.12	105	4.27	108	13.70	6.21	12.80	5.80	2
3	76	6.5	165	8	202	8.06	205	4.65	118	2.95	75	4.46	113	4.62	117	14.30	6.49	12.50	5.67	2

Handle Options:

- Stainless Steel Lever
- NIB-Seal®
- NIB-Seal® Locking Lever
- Locking Lever
- Stainless Steel Locking Lever
- Memory Stop
- Extended Lever w/ Memory Stop
- Round
- Wing
 - Horizontal and Vertical Chain



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Silicon Performance Bronze[®] Alloy • Two-Piece Body • Full Port • Blowout-Proof Stem • Stainless Trim • Vented Ball

Approved NCC CD110/14F a IADMO/ANCL 711F7 a ACME A112 4 14/CCA D12F

Approvals: MSS-SP110/145 • IAPMO/ANSI Z1157 • ASME A112.4.14/CSA B125.14 • NSF/ANSI/CAN 61/372-8 Commercial Hot 180° F • ICC-ES PMG

Size range: 1/4" - 3"

Pressure rating: 600 PSI non-shock cold working pressure Maximum pressure / temperature: 100 PSI at 300° F

Lead-free markings: Double oval in body casting, white handle and blue hang tag









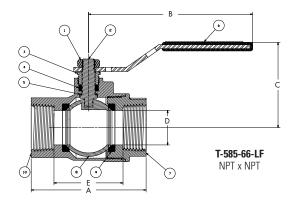


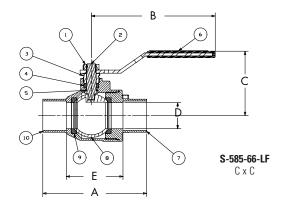
MATERIAL LIST

	WATE LIGHT
PART	SPECIFICATION
1. Handle Nut	Zinc Plated Steel
2. Stem	Stainless Steel ASTM A276 Type 316
3. Pack Gland	Brass ASTM B16 Alloy C36000
4. Packing, Stem	Virgin PTFE
5. Washer, Thrust	Reinforced PTFE
6. Handle	Zinc Plated Steel Clear Chromate Plastisol Coated
7. End Piece	Silicon Bronze ASTM B584 Alloy C87600
8. Seat Ring (2)	Reinforced PTFE
9. Ball (Vented)	Stainless Steel ASTM A276 Type 316
10. Body	Silicon Bronze ASTM B584 Alloy C87600









DIMENSIONS—WEIGHTS—QUANTITIES

							[Dime	nsion	S										
		T-585	-66-LF	S-585	-66-LF							T-585	-66-LF	S-585	-66-LF					
SI	ZE		١		4		3		;)		<u> </u>		<u> </u>	T-585	-66-LF	S-585	-66-LF	Master
In.	mm.	In.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Lbs.	Kg.	Ctn. Qty.
1/4	8	1.78	45	1.83	46	3.96	101	1.86	47	0.31	8	1.00	25	1.21	31	0.43	0.19	0.40	0.18	24
3/8	10	1.79	45	1.97	50	3.96	101	1.85	47	0.38	10	1.80	46	1.21	31	0.44	0.20	0.41	0.19	24
1/2	15	2.23	57	2.4	61	3.96	101	1.96	50	0.5	13	1.16	29	1.40	36	0.65	0.30	0.56	0.25	80
3/4	20	2.78	71	3.16	80	4.76	121	2.28	58	0.75	19	1.68	43	1.66	42	1.20	0.55	1.02	0.46	60
1	25	3.34	85	3.99	101	4.76	121	2.48	63	1	25	2.00	51	2.17	55	1.63	0.74	1.50	0.68	40
11⁄4	32	3.75	95	4.13	105	6.75	171	3.10	79	1.25	32	2.39	61	2.19	56	2.87	1.30	2.41	1.09	20
1½	40	4.26	108	4.97	126	6.75	171	3.32	84	1.5	38	2.89	73	2.79	71	3.83	1.74	3.62	1.64	10
2	65	4.80	122	6.02	153	6.75	171	3.56	90	2	51	3.40	86	3.34	85	5.57	2.53	5.54	2.51	6
2½	65	6.00	152	7.21	183	8.06	205	4.40	112	2.50	64	4.12	105	4.27	108	13.70	6.21	12.80	5.80	2
3	76	6.5	165	8	202	8.06	205	4.65	118	2.95	75	4.46	113	4.62	117	14.30	6.49	12.50	5.67	2



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Handle Options:

- Stainless Steel Lever
- NIB-Seal[®]
- NIB-Seal[®] Locking Lever
- · Locking Lever
- Stainless Steel Locking Lever
- Memory Stop
- Extended Lever w/ Memory Stop
- Round
- Wing
- Horizontal and Vertical Chain



Features: Silicon Performance Bronze® Two-Piece Body • Press Ends Leak Detection • Full Port • Blowout-Proof Stem

Approvals: MSS-SP110/145 • IAPMO/ANSI Z1157 • ASME A112.4.14/CSA B125.14 • NSF/ANSI/CAN 61/372-8 Commercial Hot 180° F • ICC-ES PMG

Size range: 1/2" - 3"

Pressure rating: 250* PSI non-shock cold working pressure Body design pressure: 600 PSI CWP non-shock cold working pressure Maximum pressure / temperature: 225 PSI at 250° F*

Lead-free markings: Double oval in body casting, white handle and blue hang tag





United States Patent No. 10,234,043 &

United States Patent

No. 11.131.403







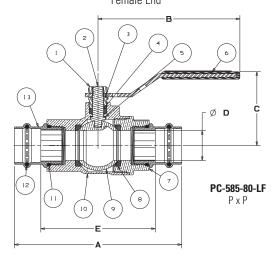
MATERIAL LIST

	IV	IAI ENIAL LIST
	PART	SPECIFICATION
1.	Handle Nut	Zinc Plated Steel
2.	Stem	Silicon Bronze ASTM B371 Alloy C69300
3.	Pack Gland	Brass ASTM B16 Alloy C36000
4.	Packing, Stem	PTFE
5.	Thrust Washer	Reinforced PTFE
6.	Handle Assembly	Zinc Plated Steel Clear Chromate Plastisol Coated
7.	Body End	Silicon Bronze ASTM B584 Alloy C87600
8.	Seat Ring (2)	Reinforced PTFE
9.	Ball (vented)	DZR Brass SAE J461 C46500 (¼"-1") Stainless Steel ASTM A276 S31600 or ASTM A351 CF8M (1¼"-3")
10.	Body	Silicon Bronze ASTM B584 Alloy C87600
11.	Boss seal o-ring (2)	EPDM
12.	O-Ring (2)	EPDM - Leak Detection
13.	Press End Adapter (2)	Wrot Copper ASTM B75 Alloy C12200



PC-585-80-LF

Press x Press Female End



DIMENSIONS—WEIGHTS—QUANTITIES

SI	ZE		1	E	3	(;)			Wei	ight
ln.	mm.	ln.	mm.	In.	mm.	ln.	mm.	ln.	mm.	In.	mm.	Lbs.	Kg.
1/2	15	3.93	100	3.96	101	1.96	50	0.50	13	2.53	64	0.80	0.36
3/4	20	5.00	127	4.76	121	2.28	58	0.75	19	3.23	82	1.56	0.71
1	25	5.61	142	4.76	121	2.48	63	1.00	25	3.84	98	2.13	1.00
11/4	32	6.23	158	6.76	172	3.10	79	1.25	32	4.21	107	3.73	1.69
1½	40	7.56	192	6.76	172	3.32	84	1.50	38	4.79	122	5.53	2.51
2	50	8.40	213	6.76	172	3.56	90	2.00	51	5.36	136	7.95	3.61
2½	65	9.49	241	8.06	205	4.33	110	2.50	64	6.55	166	16.20	7.35
3	76	10.45	265	8.06	205	4.58	116	2.95	75	7.13	181	16.50	7.48

Handle Options:

- Stainless Steel Lever
- NIB-Seal®
- NIB-Seal® Locking Lever
- Locking Lever
- Stainless Steel Locking Lever
- Memory Stop
- Extended Lever w/ Memory Stop
- Wing
 - Horizontal and Vertical Chain

*200 PSI CWP and 200 PSI at 200°F for 21/2" and above

NIBCO Press System ball valves are designed to meet MSS SP-110 with the exception of the end connection. Ball valves are down-rated from 600 PSI CWP to 250 PSI CWP to match the Press System. Male and female press-to-connect ends are new technology not yet covered in the current edition of this specification

LEAD-FREE: Weighted average lead content ≤ 0.25%

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Silicon Performance Bronze® Two-Piece Body • Copper Ends • Full Port • Blowout-Proof Stem • Stainless Trim

Approvals: MSS-SP110/145 • IAPMO/ANSI Z1157 • ASME A112.4.14/CSA B125.14 • NSF/ANSI/CAN 61/372-8 Commercial Hot 180° F • ICC-ES PMG

Size range: 1/2" - 3"

Pressure rating: 250* PSI non-shock cold working pressure

Body design pressure: 600 PSI CWP

Maximum pressure / temperature: 225 PSI at 250° F*

Lead-free markings: Double oval in body casting, white handle and blue hang tag













MATERIAL LIST

	PART	SPECIFICATION
1.	Handle Nut	Zinc Plated Steel
2.	Stem	Stainless Steel ASTM A276 Type 316
3.	Pack Gland	Brass ASTM B16 Alloy C36000
4.	Packing, Stem	PTFE
5.	Thrust Washer	Reinforced PTFE
6.	Handle Assembly	Plated Steel with Plastisol Coating
7.	Body End	Silicon Bronze ASTM B584 Alloy C87600
8.	Seat Ring (2)	Reinforced PTFE
9.	Ball (vented)	Stainless Steel ASTM A276 Type 316
10.	Body	Silicon Bronze ASTM B584 Alloy C87600
11.	Boss seal o-ring (2)	EPDM
12.	O-Ring (2)	EPDM - Leak Detection
13.	Press End Adapter (2)	Wrot Copper ASTM B75 Alloy C12200

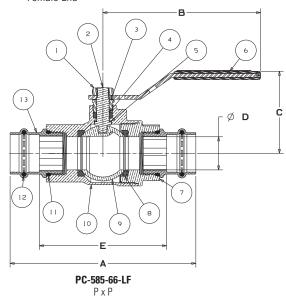
Handle Options:

- Stainless Steel Lever
- NIB-Seal®
- NIB-Seal® Locking Lever
- Locking Lever
- Stainless Steel Locking Lever
- Memory Stop
- Extended Lever w/ Memory Stop
- Round
- Wing
- Horizontal and Vertical Chain



PC-585-66-LF

Press x Press Female End



DIMENSIONS—WEIGHTS—QUANTITIES

SIZE			1	E	3		;)	E		We	ight
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
1/2	15	3.93	100	3.96	101	1.96	50	0.50	13	2.53	64	0.80	0.36
3/4	20	5.00	127	4.76	121	2.28	58	0.75	19	3.23	82	1.56	0.71
1	25	5.61	142	4.76	121	2.48	63	1.00	25	3.84	98	2.13	1.00
1-1/4	32	6.23	158	6.76	172	3.10	79	1.25	32	4.21	107	3.73	1.69
1-1/2	40	7.56	192	6.76	172	3.32	84	1.50	38	4.79	122	5.53	2.51
2	50	8.40	213	6.76	172	3.56	90	2.00	51	5.36	136	7.95	3.61
2-1/2	65	9.49	241	8.06	205	4.33	110	2.50	64	6.55	166	16.20	7.35
3	76	10.45	265	8.06	205	4.58	116	2.95	75	7.13	181	16.50	7.48



*200 PSI CWP and 200 PSI at 200°F for 21/2" and above

NIBCO Press System ball valves are designed to meet MSS SP-110 with the exception of the end connection. Ball valves are down-rated from 600 PSI CWP to 250 PSI CWP to match the Press System. Male and female press-to-connect ends are new technology not yet covered in the current edition of this specification



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Silicon Performance Bronze® Body • Copper End • Full Port • Blowout-Proof Stem

Approvals: MSS-SP110/145 ● IAPMO/ANSI Z1157 ● ASME A112.4.14/CSA B125.14 ●

NSF/ANSI/CAN 61/372-8 Commercial Hot 180° F • ICC-ES PMG

Size range: 1/2" - 2"

Pressure rating: 250 PSI non-shock cold working pressure

Body design pressure: 600 PSI CWP

Maximum pressure / temperature: 225 PSI at 250° F

Lead-free markings: Double oval in body casting, white handle and blue hang tag











MATERIAL LIST

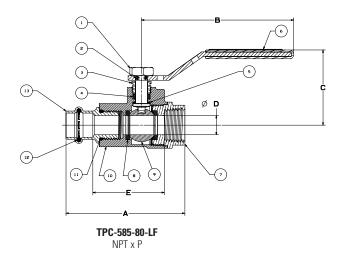
	•••	/
	PART	SPECIFICATION
1.	Handle Nut	Plated Steel
2.	Stem	Silicon Bronze ASTM B371 Alloy C69300
3.	Pack Gland	Brass ASTM B16 Alloy C36000
4.	Packing, Stem	PTFE
5.	Thrust Washer	Reinforced PTFE
6.	Handle Assembly	Plated Steel with Plastisol Coating
7.	Body End	Silicon Bronze ASTM B584 Alloy C87600
8.	Seat Ring (2)	Reinforced PTFE
9.	Ball	Silicon Bronze ASTM B283 Alloy C69300
10.	Body	Silicon Bronze ASTM B584 Alloy C87600
11.	Boss seal o-ring	EPDM
12.	O-Ring	EPDM
13.	Press End Adapter	Wrot Copper ASTM B75 Alloy C12200

Handle Options:

- Stainless Steel Lever
- NIB-Seal[®]
- NIB-Seal[®] Locking Lever
- Locking Lever
- Stainless Steel Locking Lever
- Memory Stop
- Extended Lever w/ Memory Stop
- Round
- Wing
- Horizontal and Vertical Chain



TPC-585-80-LF
Thread x Press
Female



DIMENSIONS—WEIGHTS

														112101110						
NOM	SIZE		A	E	3	()		D		Ε		F	(G		<u> </u>	We	ight	Master
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Lbs.	Kg.	Lbs.	Kg.	Ctn. Qty.
1/2	15	3.1	79	3.96	101	1.96	50	0.5	13	1.86	47	1.2	30	0.7	18	5.93	151	0.80	0.36	50
3/4	20	3.96	101	4.76	121	2.28	58	0.75	19	2.45	62	1.56	40	0.96	24	7.33	186	1.35	0.61	30
1	25	4.47	114	4.76	121	2.48	63	1	25	2.92	74	1.97	50	0.89	23	7.56	192	1.90	0.86	20
1-1/4	32	4.99	127	6.76	172	3.1	79	1.25	32	3.3	84	2.31	59	1.01	26	9.86	250	3.20	1.45	12
1-1/2	40	5.9	150	6.76	172	3.32	84	1.5	38	3.84	98	2.84	72	1.39	35	10.53	267	4.40	2.00	6
2	50	6.61	168	6.76	172	3.56	90	2	51	4.38	111	3.54	90	1.51	38	10.94	278	6.45	2.93	6



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Silicon Performance Bronze® Body • Copper End • Full Port • Blowout-Proof Stem • Stainless Trim

Approvals: MSS-SP110/145 ● IAPMO/ANSI Z1157 ● ASME A112.4.14/CSA B125.14 ● NSF/ANSI/CAN 61/372-8 Commercial Hot 180° F ● ICC-ES PMG

Size range: 1/2" - 2"

Pressure rating: 250 PSI non-shock cold working pressure

Body design pressure: 600 PSI CWP

Maximum pressure / temperature: 225 PSI at 250° F

Lead-free markings: Double oval in body casting, white handle and blue hang tag











MATERIAL LIST

	PART	SPECIFICATION
1.	Handle Nut	Plated Steel
2.	Stem	Stainless Steel ASTM A276 Type 316
3.	Pack Gland	Brass ASTM B16 Alloy C36000
4.	Packing, Stem	PTFE
5.	Thrust Washer	Reinforced PTFE
6.	Handle Assembly	Plated Steel with Plastisol Coating
7.	Body End	Silicon Bronze ASTM B584 Alloy C87600
8.	Seat Ring (2)	Reinforced PTFE
9.	Ball (vented)	Stainless Steel ASTM A276 Type 316
10.	Body	Silicon Bronze ASTM B584 Alloy C87600
11.	Boss seal o-ring	EPDM
12.	O-Ring	EPDM
13.	Press End Adapter	Wrot Copper ASTM B75 Alloy C12200

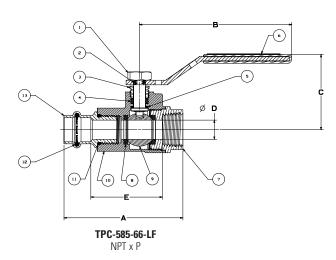
Handle Options:

- Stainless Steel Lever
- NIB-Seal®
- NIB-Seal® Locking Lever
- Locking Lever
- Stainless Steel Locking Lever
- Memory Stop
- Extended Lever w/ Memory Stop
- Round
- Wing
- Horizontal and Vertical Chain



TPC-585-66-LF

Thread x Press Female



DIMENSIONS—WEIGHTS

NOM	NOM SIZE		Α		3	С		C [D E			=		ì	J	ı	We	ight	Master
ln.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Lbs.	Kg.	Lbs.	Kg.	Ctn. Qty.
1/2	15	3.1	79	3.96	101	1.96	50	0.5	13	1.86	47	1.2	30	0.7	18	5.93	151	0.80	0.36	50
3/4	20	3.96	101	4.76	121	2.28	58	0.75	19	2.45	62	1.56	40	0.96	24	7.33	186	1.35	0.61	30
1	25	4.47	114	4.76	121	2.48	63	1	25	2.92	74	1.97	50	0.89	23	7.56	192	1.90	0.86	20
1-1/4	32	4.99	127	6.76	172	3.1	79	1.25	32	3.3	84	2.31	59	1.01	26	9.86	250	3.20	1.45	12
1-1/2	40	5.9	150	6.76	172	3.32	84	1.5	38	3.84	98	2.84	72	1.39	35	10.53	267	4.40	2.00	6
2	50	6.61	168	6.76	172	3.56	90	2	51	4.38	111	3.54	90	1.51	38	10.94	278	6.45	2.93	6



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Silicon Performance Bronze® Alloy • Two-Piece Body •

Conventional Port • Blowout-Proof Stem

Approvals: MSS-SP110/145 • IAPMO/ANSI Z1157 • ASME A112.4.14/CSA B125.14 •

NSF/ANSI/CAN 61/372-8 Commercial Hot 180° F • ICC-ES PMG

Size range: 1-1/4" - 3"

Pressure rating: 600 PSI non-shock cold working pressure

Maximum pressure / temperature: 100 PSI at 300° F

Lead-free markings: Double oval in body casting, white handle and blue hang tag







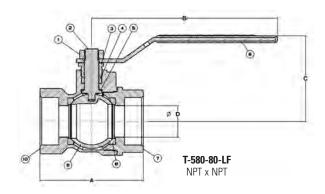




MATERIAL LIST

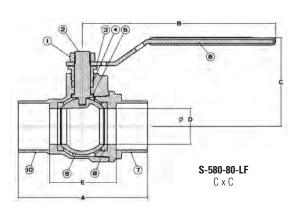
	PART	SPECIFICATION
1.	Nut, Handle	Steel, Plated
2.	Stem	Silicon Bronze ASTM B371 Alloy C69300
3.	Pack Gland	Brass ASTM B16 Alloy C36000
4.	Packing, Stem	Virgin PTFE
5.	Washer, Thrust	Reinforced PTFE
6.	Handle	Steel, Plated Plastisol Coated
7.	End Piece	Silicon Bronze ASTM B584 Alloy C87600
8.	Seat Ring	Reinforced PTFE
9.	Ball	Silicon Bronze ASTM B283 Alloy C69300
10.	Body	Silicon Bronze ASTM B584 Alloy C87600





Handle Options:

- NIB-Seal® (up to 2-1/2") Extended lever w/ memory stop
- · Locking lever
- · Memory stop
- Round (up to 2½")
- Horizontal and vertical chain (up to 2-1/2")



DIMENSIONS—WEIGHTS—QUANTITIES

													Dime	nsion	ıs															
		T-580	-80-LF	S-580	-80-LF							T-580	-80-LF	S-580)-80-LF			T-580	-80-LF	S-580	-80-LF	T-580-	-80-LF	S-580	-80-LF	•				
SI	ZE		4		A		В		<u>c </u>)		E		E		F		G	-	G		J		J	T-580	-80-LF	S-580	-80-LF	Master
In.	mm.	In.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	ln.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Lbs.	Kg.	Ctn. Qty.
1-1/4	32	3.54	90	3.9	99	4.76	121	2.48	63	1.00	25	2.18	55	1.96	50	2.09	53	0.68	17	0.97	25	6.53	166	6.69	170	2.17	0.98	1.78	0.81	20
1-1/2	40	3.75	95	4.51	115	6.75	171	3.09	78	1.25	32	2.39	61	2.33	59	2.46	62	0.68	17	1.09	28	8.62	219	8.99	228	3.27	1.48	2.87	1.30	20
2	50	4.30	109	5.49	139	6.75	171	3.32	84	1.50	38	2.90	74	2.81	71	2.95	75	0.70	18	1.34	34	8.90	226	9.49	241	5.09	2.31	4.60	2.08	10
2-1/2	65	5.43	138	6.34	161	6.75	171	3.56	90	2.00	51	3.55	90	3.40	86	3.75	95	0.94	24	1.47	37	9.46	240	9.89	251	8.25	3.74	8.18	3.71	6
3 [†]	80	6.16	156	7.53	191	8.06	205	4.40	112	2.50	64	_	_	4.21	107	6.61	168	1.02	26	1.66	42	11.14	283	11.83	300	14.62	7.00	13.75	6.00	4

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Silicon Performance Bronze® Alloy • Two-Piece Body • Conventional Port • Blowout-Proof Stem • Stainless Trim • Vented Ball







Dezincification Resistan



Approvals: MSS-SP110/145 • IAPMO/ANSI Z1157 • ASME A112.4.14/CSA B125.14 • NSF/ANSI/CAN 61/372-8 Commercial Hot 180° F • ICC-ES PMG

Size range: 1-1/4" - 3"

Pressure rating: 600 PSI non-shock cold working pressure

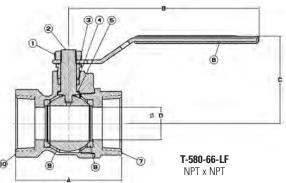
Maximum pressure / temperature: 100 PSI at 300° F

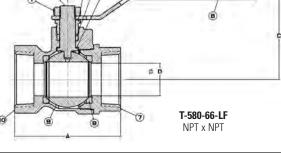
Lead-free markings: Double oval in body casting, white handle and blue hang tag

MATERIAL LICT

	IVIAI ENIAL LIÐ I	
PART	SPECIFICATION	
1. Nut, Handle	Steel, Stainless	_
2. Stem	Stainless Steel ASTM A276 Type 316	_
3. Pack Gland	Brass ASTM B16 Alloy C36000	
4. Packing, Stem	Virgin PTFE	
5. Washer, Thrust	Reinforced PTFE	_
6. Handle	Steel, Plated Plastisol Coated	_
7. End Piece	Silicon Bronze ASTM B584 Alloy C87600	
8. Seat Ring	Reinforced PTFE	
9. Ball (Vented)	Stainless Steel ASTM A276 Type 316	
10. Body	Silicon Bronze ASTM B584 Alloy C87600	

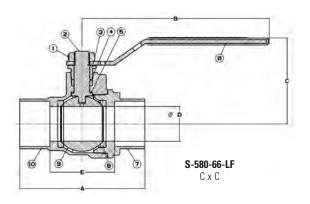






Handle Options:

- NIB-Seal® (up to 2-1/2'
- · Locking lever
- · Memory stop
- Extended lever w/ memory stop
- Round (up to 2-1/2")
- Horizontal and vertical chain (up to 2-1/2")



DIMENSIONS—WEIGHTS—QUANTITIES

																						_								
												I	Dime	nsion	S															
		T-580	-66-LF	S-580	-66-LF							T-580	-66-LF	S-580	-66-LF			T-580	-66-LF	S-580)-66-LF	T-580	-66-LF	S-580	-66-LF					
SI	ZE		4		A		В		<u>c</u>		D		E		E		F		G		G		<u> </u>		J	T-580	-66-LF	S-580	-66-LF	Master
ln.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Lbs.	Kg.	Ctn. Qty.
1-1/4	32	3.54	90	3.9	99	4.76	121	2.48	63	1.00	25	2.18	55	1.96	50	2.09	53	0.68	17	0.97	25	6.53	166	6.69	170	2.17	0.98	1.78	0.81	20
1-1/2	40	3.75	95	4.51	115	6.75	171	3.09	78	1.25	32	2.39	61	2.33	59	2.46	62	0.68	17	1.09	28	8.62	219	8.99	228	3.27	1.48	2.87	1.30	20
2	50	4.30	109	5.49	139	6.75	171	3.32	84	1.50	38	2.90	74	2.81	71	2.95	75	0.70	18	1.34	34	8.90	226	9.49	241	5.09	2.31	4.60	2.08	10
2-1/2	65	5.43	138	6.34	161	6.75	171	3.56	90	2.00	51	3.55	90	3.40	86	3.75	95	0.94	24	1.47	37	9.46	240	9.89	251	8.25	3.74	8.18	3.71	6
3⁺	80	6.16	156	7.53	191	8.06	205	4.33	110	2.50	64	4.37	111	4.35	110	6.54	166	1.02	26	1.66	42	11.26	286	11.83	300	14.59	7.00	17.32	6.00	4

†Patent Pending

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Silicon Performance Bronze® Alloy • Two-Piece Body • Full Port • 3/4" Hose Connection with Cap • Blowout-Proof Stem

Approvals: MSS-SP110/145 ● IAPMO/ANSI Z1157 ● ASME A112.4.14/CSA B125.14 ● NSF/ANSI/CAN 61/372 ● ICC-ES PMG

Size range: 1/2" & 3/4"

Pressure rating: 600 PSI non-shock cold working pressure

Lead-free markings: Double oval in body casting, white handle and blue hang tag











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	= 0.11			

		VII LIII LE LIOI
	PART	SPECIFICATION
1.	Handle Nut	Steel, Plated
2.	Stem	Silicon Bronze ASTM B371 Alloy C69300
3.	Pack Gland	Brass ASTM B16 Alloy C36000
4.	Packing, Stem	Virgin PTFE
5.	Thrust Washer	Reinforced PTFE
6.	Handle	Steel, Plated Plastisol Coated
7.	Hose Body End	Silicon Bronze ASTM B371 Alloy C69300
8.	Seat Ring (2)	Reinforced PTFE
9.	Ball	Silicon Bronze ASTM B283 Alloy C69300
10.	Body	Silicon Bronze ASTM B584 Alloy C87600
11.	Hose Cap Assembly ¹	Die Cast Brass, EPDM Gasket, Soft PVC Retainer

¹ Cap is for hose end thread protection only. Not to be used for pressure containing purposes.

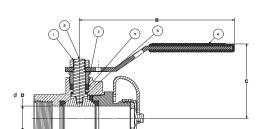
Note: valves designed to MSS SP 110 with exception of the hose end connection which is not covered by the standard.

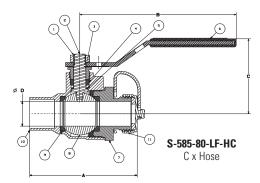
T-585-80-LF-HC

NPT x Hose



S-585-80-LF-HC Solder x Hose





Handle Options:

- Stainless Steel Lever
- NIB-Seal®
- NIB-Seal® Locking Lever
- Locking Lever
- Stainless Steel Locking Lever
- Memory Stop
- Extended Lever w/ Memory Stop
- Wing
- Horizontal and Vertical Chain

DIMENSIONS—WEIGHTS—QUANTITIES

												Thr	ead	So	lder							
SI	ZE		A		3		;		D		<u> </u>		F		F	(<u> </u>	Thr	ead	Sol	der	Master
In.	mm.	In.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	In.	mm.	Lbs.	Kg.	Lbs.	Kg.	Ctn Qty.
1/2	15	2.74	70	3.96	101	1.96	50	0.5	13	5.06	129	1.57	40	1.31	33	0.53	13	0.80	0.36	0.74	0.34	100
3/4	20	3.14	80	4.76	121	2.28	58	0.75	19	6.15	156	1.98	50	1.71	43	0.55	14	1.46	0.66	1.42	0.65	50



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Features: Silicon Performance Bronze® Alloy • Two-Piece Body • Full Port • Stainless Trim • 3/4" Hose Connection with Cap and Chain • Blowout-Proof Stem

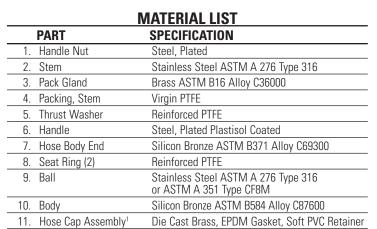
Approvals: MSS-SP110/145 ● IAPMO/ANSI Z1157 ● ASME A112.4.14/CSA B125.14 ●

NSF/ANSI/CAN 61/372 • ICC-ES PMG

Size range: 1/2" & 3/4"

Pressure rating: 600 PSI non-shock cold working pressure

Lead-free markings: Double oval in body casting, white handle and blue hang tag



¹ Cap is for hose end thread protection only. Not to be used for pressure containing purposes.

Note: valves designed to MSS SP 110 with exception of the hose end connection which is not covered by the standard.





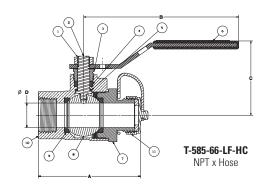


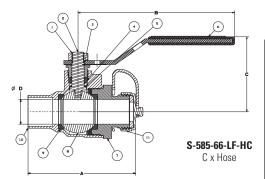






S-585-66-LF-HC Solder x Hose





Handle Options:

- Stainless Steel Lever
- NIB-Seal[®]
- NIB-Seal® Locking Lever
- Locking Lever
- · Stainless Steel Locking Lever
- Memory Stop
- Extended Lever w/ Memory Stop
- Round
- Wing
- Horizontal and Vertical Chain

DIMENSIONS—WEIGHTS—QUANTITIES

SI	ZE		Α	E	3	(D		<u> </u>		F	(G	Thr	ead	Sol	der	Master
ln.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	ln.	mm.	In.	mm.	ln.	mm.	Lbs.	Kg.	Lbs.	Kg.	Ctn Qty.
1/2	15	2.74	70	3.96	101	1.96	50	0.5	13	5.06	129	1.19	30	0.53	13	0.80	0.36	0.74	0.34	100
3/4	20	3.14	80	4.76	121	2.28	58	0.75	19	6.15	156	1.71	43	0.55	14	1.46	0.66	1.42	0.65	50



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Silicon Performance Bronze® Alloy ● Two-Piece Body ● Full Port ● Blowout-Proof Stem ● Copper End x 3/4" Hose Connection with Cap and Chain

Approvals: MSS-SP110/145 • IAPMO/ANSI Z1157 • ICC-ES PMG •

NSF/ANSI/CAN 61/372 • ASME A112.4.14/CSA B125.14

Size range: 1/2" & 3/4"

Pressure rating: 250 PSI non-shock cold working pressure

Lead-free markings: Double oval in body casting, white handle and blue hang tag











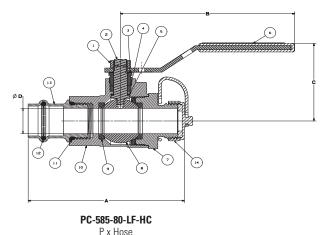
MATERIAL LIST

	PART	SPECIFICATION
1.	Handle Nut	Zinc Plated Steel
2.	Stem	Silicon Bronze ASTM B371 Alloy C69300
3.	Pack Gland	Brass ASTM B16 Alloy C36000
4.	Packing	PTFE
5.	Thrust Washer	Reinforced PTFE
6.	Handle Assembly	Zinc Plated Steel with Plastisol Coating
7.	Hose Body End	Silicon Bronze ASTM B371 Alloy C69300
8.	Ball	Silicon Bronze ASTM B283 Alloy C69300
9.	Seat Ring (2)	Reinforced PTFE
10.	Body	Silicon Bronze ASTM B584 Alloy C87600
11.	Boss seal o-ring	EPDM
12.	O-Ring	EPDM
13.	Press End Adapter	Wrot Copper ASTM B75 Alloy C12200
14.	Hose Cap Assembly ¹	Die Cast Brass, EPDM Gasket, Soft PVC Retainer
4		

¹ Cap is for hose end thread protection only. Not to be used for pressure containing purposes.



PC-585-80-LF-HC
Press Female x Hose End



Handle Options:

- Stainless Steel Lever
- NIB-Seal[®]
- NIB-Seal® Locking Lever
- · Locking Lever
- · Stainless Steel Locking Lever
- Memory Stop
- Extended Lever w/ Memory Stop
- Round
- Wing
- Horizontal and Vertical Chain

DIMENSIONS—WEIGHTS—QUANTITIES

SI	SIZE		A	E	3	()		D		Ε		F		G	Wei	ight
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
1/2	15	3.61	92	3.76	96	1.96	50	0.50	13	5.93	151	1.53	39	0.70	18	12.70	0.42
3/4	20	4.32	110	4.76	121	2.28	58	0.75	19	7.28	185	1.95	50	0.96	24	1.70	0.77



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Silicon Performance Bronze® Alloy ● Two-Piece Body ● Full Port ● Stainless Trim ● Blowout-Proof Stem ● Copper Ends x 3/4" Hose Connection with Cap

Approvals: MSS-SP110/145 • IAPMO/ANSI Z1157 • ICC-ES PMG •

NSF/ANSI/CAN 61/372 • ASME A112.4.14/CSA B125.14

Size range: 1/2" & 3/4"

Pressure rating: 250 PSI non-shock cold working pressure

Lead-free markings: Double oval in body casting, white handle and blue hang tag











MATERIAL LIST

	PART	SPECIFICATION
1.	Handle Nut	Zinc Plated Steel
2.	Stem	Stainless Steel ASTM A276 Type 316
3.	Pack Gland	Brass ASTM B16 Alloy C36000
4.	Packing	PTFE
5.	Thrust Washer	Reinforced PTFE
6.	Handle Assembly	Zinc Plated Steel with Plastisol Coating
7.	Hose Body End	Silicon Bronze ASTM B371 Alloy C69300
8.	Ball (vented)	Stainless Steel ASTM A276 Type 316
9.	Seat Ring (2)	Reinforced PTFE
10.	Body	Silicon Bronze ASTM B584 Alloy C87600
11.	Boss seal o-ring	EPDM
12.	O-Ring	EPDM
13.	Press End Adapter	Wrot Copper ASTM B75 Alloy C12200
14.	Hose Cap Assembly ¹	Die Cast Brass, EPDM Gasket, Soft PVC Retainer

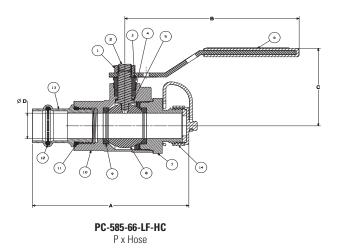
¹ Cap is for hose end thread protection only. Not to be used for pressure containing purposes.

Handle Options:

- Stainless Steel Lever
- NIB-Seal®
- NIB-Seal® Locking Lever
- Locking Lever
- Stainless Steel Locking Lever
- Memory Stop
- Extended Lever w/ Memory Stop
- Round
- Wing
- Horizontal and Vertical Chain



PC-585-66-LF-HC Press Female x Hose End



DIMENSIONS—WEIGHTS—QUANTITIES

SI	SIZE		A		3	(D		E		F		G	We	ight
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
1/2	15	3.61	92	3.76	96	1.96	50	0.50	13	5.93	151	1.31	33	0.70	18	0.92	0.42
3/4	20	4.32	110	4.76	121	2.28	58	0.75	19	7.28	185	1.62	41	0.96	24	1.70	0.77



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.







Spring Return Handle to close • Stainless Steel Trim • Silicon Performance Bronze® Alloy • Two-Piece Body • Full Port • Blowout-Proof Stem

600 PSI/41 bar non-shock cold working pressure

Lead-free markings: Double oval in body casting, white handle and blue hang tag

Approvals: MSS SP-110/145 • NSF/ANSI/CAN 61/372-8 Commercial Hot 180° F







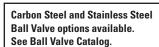
MATERIAL LIST

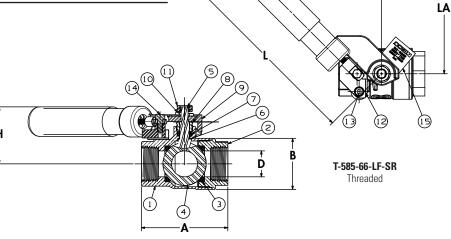
PART	SPECIFICATION
1. Body	ASTM B584 C87600 DZR Lead-free Silicon Bronze Casting
2. Body End Piece	ASTM B584 C87600 DZR Lead-free Silicon Bronze Casting
3. Seats (2)	Reinforced PTFE
4. Ball (Vented)	ASTM A276 S31600
5. Stem	ASTM A276 S31600
6. Thrust Washer	Reinforced PTFE
7. Stem Packing	Virgin PTFE
8. Threaded Pack Gland	Brass ASTM B16 Alloy C36000
9. Handle assembly	Stainless Steel Type 316 & 304 w/Vinyl Cover
10. Lock Washer	Stainless Steel
11. Handle Nut	Stainless Steel
12. Mounting Plate	Stainless Steel ASTM A351 Type CF8M
13. Socket Head Cap Screw (2)	Stainless Steel Type 304
14. Hex Shoulder Bolt	Stainless Steel



T-585-66-LF-SR

Threaded





DIMENSIONS—WEIGHTS

	Dimensions															_	
S	ize		Α		В		<u> </u>		Н		L		A		В		
In.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	Lbs.	Kg
1/4	6.35	1.81	46	1.57	40	0.31	8	1.63	41	7.11	181	4.84	123	5.79	147	1.03	0.47
3/8	9.53	1.81	46	1.57	40	0.38	10	1.63	41	7.11	181	4.84	123	5.79	147	1.03	0.47
1/2	12.70	2.25	57	1.57	40	0.50	13	1.73	44	7.11	181	4.84	123	5.79	147	1.23	0.56
3/4	19.05	2.78	71	2.00	51	0.75	19	2.01	51	7.28	185	4.92	125	6.04	153	1.86	0.84
1	25.40	3.34	85	1.97	50	1.00	25	2.22	56	7.28	185	4.92	125	6.04	153	2.56	1.16
1 1/4	31.75	3.75	95	2.31	59	1.25	32	2.69	68	9.51	242	6.50	165	7.62	194	3.83	1.74
1 ½	38.10	4.25	108	2.84	72	1.50	38	2.91	74	9.51	242	6.50	165	7.62	194	4.98	2.26
2	50.80	4.82	122	3.54	90	2.00	51	3.15	80	9.51	242	6.50	165	7.62	194	7.48	3.39



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.





Spring Return Handle to Close • Silicon Performance Bronze® Alloy • Two-Piece Body • Full Port • Blowout-Proof Stem

600 PSI/41 bar non-shock cold working pressure

Lead-free markings: Double oval in body casting, white handle and blue hang tag

Approvals: MSS SP-110/145 • NSF/ANSI/CAN 61/372-8 Commercial Hot 180° F



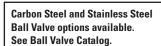
MATERIAL LIST

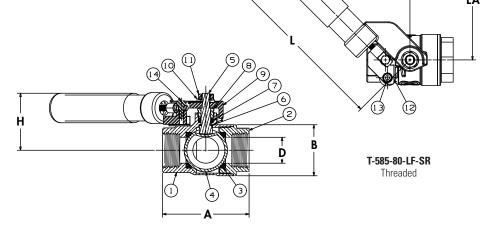
	PART	SPECIFICATION
1.	Body	ASTM B584 C87600 DZR Lead-free Silicon Bronze Casting
2.	Body End Piece	ASTM B584 C87600 DZR Lead-free Silicon Bronze Casting
3.	Seats (2)	Reinforced PTFE
1	Dall (Vantad)	ASTM B584 C46500 DZR Lead-free Brass (1/4" - 1")
4.	Ball (Vented)	ASTM A276 S31600 or A351 CF8M Stainless Steel (11/4" -2")
5.	Stem	ASTM C69300 Lead-free Silicon Bronze
6.	Thrust Washer	Reinforced PTFE
7.	Stem Packing	Virgin PTFE
8.	Threaded Pack Gland	Brass ASTM B16 Alloy C36000
9.	Handle assembly	Stainless Steel Type 316 & 304 w/Vinyl Cover
10.	Lock Washer	Stainless Steel
11.	Handle Nut	Stainless Steel
12.	Mounting Plate	Stainless Steel ASTM A351 Type CF8M
13.	Socket Head Cap Screw (2)	Stainless Steel Type 304
14.	Hex Shoulder Bolt	Stainless Steel



T-585-80-LF-SR

Threaded





DIMENSIONS—WEIGHTS

	Dimensions																
S	ize		Α		В		C				L		A		В		
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg
1/4	6.35	1.81	46	1.57	40	0.31	8	1.63	41	7.11	181	4.84	123	5.79	147	1.03	0.47
3/8	9.53	1.81	46	1.57	40	0.38	10	1.63	41	7.11	181	4.84	123	5.79	147	1.03	0.47
1/2	12.70	2.25	57	1.57	40	0.50	13	1.73	44	7.11	181	4.84	123	5.79	147	1.23	0.56
3/4	19.05	2.78	71	2.00	51	0.75	19	2.01	51	7.28	185	4.92	125	6.04	153	1.91	0.87
1	25.40	3.34	85	1.97	50	1.00	25	2.22	56	7.28	185	4.92	125	6.04	153	2.41	1.09
1 1/4	31.75	3.75	95	2.31	59	1.25	32	2.69	68	9.51	242	6.50	165	7.62	194	3.88	1.76
1 ½	38.10	4.25	108	2.84	72	1.50	38	2.91	74	9.51	242	6.50	165	7.62	194	4.43	2.01
2	50.80	4.82	122	3.54	90	2.00	51	3.15	80	9.51	242	6.50	165	7.62	194	6.33	2.87



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.





Spring Return Handle to Close • 3/4" Hose Connection w/ Cap • Silicon Performance Bronze® Alloy • Two-Piece Body • Full Port • Blowout-Proof Stem

600 PSI/41 bar non-shock cold working pressure

Lead-free markings: Double oval in body casting, white handle and blue hang tag

Approvals: MSS SP-110/145 • NSF/ANSI/CAN 61/372







MATERIAL LIST

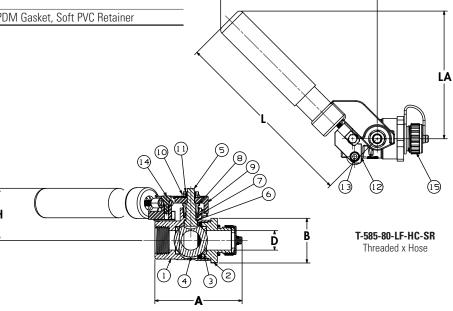
	PART	SPECIFICATION
1.	Body	ASTM B584 C87600 DZR Lead-free Silicon Bronze Casting
2.	Body End Piece	ASTM B371 C69300
3.	Seats (2)	Reinforced PTFE
4.	Ball (Vented)	ASTM B584 C46500 DZR Lead-free Brass
5.	Stem	ASTM C69300 Lead-free Silicon Bronze
6.	Thrust Washer	Reinforced PTFE
7.	Stem Packing	Virgin PTFE
8.	Threaded Pack Gland	Brass ASTM B16 Alloy C36000
9.	Handle assembly	Stainless Steel Type 316 & 304 w/Vinyl Cover
10.	Lock Washer	Stainless Steel
11.	Handle Nut	Stainless Steel
12.	Mounting Plate	Stainless Steel ASTM A351 Type CF8M
13.	Socket Head Cap Screw (2)	Stainless Steel Type 304
14.	Hex Shoulder Bolt	Stainless Steel
15.	Hose cap Assembly	Die Cast Brass, EPDM Gasket, Soft PVC Retainer



T-585-80-LF-HC-SR Threaded x Hose

LB.

Carbon Steel and Stainless Steel Ball Valve options available. See Ball Valve Catalog.



DIMENSIONS—WEIGHTS

	Dimensions																
S	ize		4		3		<u> </u>				<u> </u>		Α		В		
ln.	mm.	ln.	mm.	In.	mm.	ln.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg
1/2	12.70	2.95	75	1.57	40	0.50	13	1.73	44	7.11	181	4.84	123	5.79	147	1.28	0.58
3/4	19.05	3.37	86	2.00	51	0.75	19	2.90	74	7.28	185	4.92	125	6.04	153	1.96	0.89



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



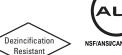


Spring Return Handle to Close • Press Ends Leak Detection • Silicon Performance Bronze® Alloy • Two-Piece Body • Full Port • Blowout-Proof Stem

250 PSI/17 bar non-shock cold working pressure

Lead-free markings: Double oval in body casting, white handle and blue hang tag

Approvals: MSS SP-110/145 • NSF/ANSI/CAN 61/372-8 Commercial Hot 180° F





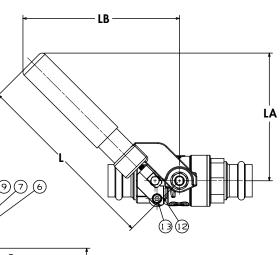
MATERIAI LIST

		WAI LINAL LIST
	PART	SPECIFICATION
1.	Body	ASTM B584 C87600 DZR Lead-free Silicon Bronze Casting
2.	Body End Piece	ASTM B584 C87600 DZR Lead-free Silicon Bronze Casting
3.	Seats (2)	Reinforced PTFE
1	Ball (Vented)	ASTM B584 C46500 DZR Lead-free Brass (1/2" - 1")
4.	Dali (velileu)	ASTM A276 S31600 or A351 CF8M Stainless Steel (11/4" -2")
5.	Stem	ASTM C69300 Lead-free Silicon Bronze
6.	Thrust Washer	Reinforced PTFE
7.	Stem Packing	Virgin PTFE
8.	Threaded Pack Gland	Brass ASTM B16 Alloy C36000
9.	Handle assembly	Stainless Steel Type 316 and 304 with Vinyl Cover
10.	Lock Washer	Stainless Steel
11.	Handle Nut	Stainless Steel
12.	Mounting Plate	Stainless Steel ASTM A351 Type CF8M
13.	Socket Head Cap Screw (2)	Stainless Steel Type 304
14.	Hex Shoulder Bolt	Stainless Steel
15.	Press End Adapter (2)	ASTM B75 Alloy C12200 Wrot Copper
16.	Boss Seal (2)	EPDM
17.	Press End Seal (2)	EPDM (Leak Detection)

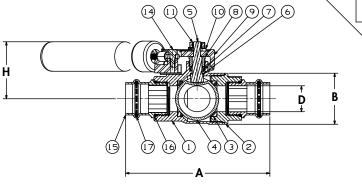


PC-585-80-LF-SR

Press x Press



Carbon Steel and Stainless Steel Ball Valve options available. See Ball Valve Catalog.



DIMENSIONS—WEIGHTS

																	
	Dimensions														_		
S	ize		Α	B		C		H		L		LA		LB			
ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	Lbs.	Kg
1/2	12.70	3.95	100	1.57	40	0.50	13	1.73	44	7.11	181	4.84	123	5.79	147	1.43	0.65
3/4	19.05	5.10	130	2.00	51	0.75	19	2.01	51	7.28	185	4.92	125	6.04	153	2.16	0.98
1	25.40	5.56	141	1.97	50	1.00	25	2.22	56	7.28	185	4.92	125	6.04	153	2.76	1.25
1 1/4	31.75	6.23	158	2.31	59	1.25	32	2.69	68	9.51	242	6.50	165	7.62	194	4.43	2.01
1 ½	38.10	7.55	192	2.84	72	1.50	38	2.91	74	9.51	242	6.50	165	7.62	194	5.33	2.42
2	50.80	8.38	213	3.54	90	2.00	51	3.15	80	9.51	242	6.50	165	7.62	194	7.63	3.46

NIBCO Press System ball valves are designed to meet MSS SP-110 with the exception of the end connection. Ball valves are down-rated from 600 PSI CWP to 250 PSI CWP to match the Press System. Male and female press-to-connect ends are new technology not yet covered in the current edition of this specification.



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

LEAD-FREE: Weighted average lead content ≤ 0.25%

PC-585-80-LF-SR Press x Press





Spring Return Handle to Close ● Press End Leak Detection ● 3/4" Hose Connection w/ Cap ● Silicon Performance Bronze® Alloy ● Two-Piece Body ● Full Port ● Blowout-Proof Stem

250 PSI/17 bar non-shock cold working pressure

Lead-free markings: Double oval in body casting, white handle and blue hang tag

Approvals: MSS SP-110/145 • NSF/ANSI/CAN 61/372







MATERIAL LIST

		, (1 = 1) (1 = 1)
	PART	SPECIFICATION
1.	Body	ASTM B584 C87600 DZR Lead-free Silicon Bronze Casting
2.	Body End Piece	ASTM B371 C69300
3.	Seats (2)	Reinforced PTFE
4.	Ball (Vented)	ASTM B584 C46500 DZR Lead-free Brass
5.	Stem	ASTM C69300 Lead-free Silicon Bronze
6.	Thrust Washer	Reinforced PTFE
7.	Stem Packing	Virgin PTFE
8.	Threaded Pack Gland	Brass ASTM B16 Alloy C36000
9.	Handle assembly	Stainless Steel Type 316 and 304 with Vinyl Cover
10.	Lock Washer	Stainless Steel
11.	Handle Nut	Stainless Steel
12.	Mounting Plate	Stainless Steel ASTM A351 Type CF8M
13.	Socket Head Cap Screw (2)	Stainless Steel Type 304
14.	Hex Shoulder Bolt	Stainless Steel
15.	Press End Adapter	ASTM B75 Alloy C12200 Wrot Copper
16.	Boss Seal	EPDM
17.	Press End Seal	EPDM (Leak Detection)
18.	Hose cap Assembly	Die Cast Brass, EPDM Gasket, Soft PVC Retainer

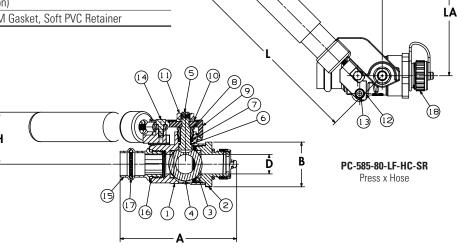


PC-585-80-LF-HC-SR

Press x Hose

LB

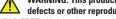
Carbon Steel and Stainless Steel Ball Valve options available. See Ball Valve Catalog.



DIMENSIONS—WEIGHTS

							Di	mensio	ns								
S	Size A B C H L LA LB															•	
ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	Lbs.	Kg
1/2	12.70	3.82	97	1.57	40	0.50	13	1.73	44	7.11	181	4.84	123	5.79	147	1.38	0.63
3/4	19.05	4.50	114	2.00	51	0.75	19	2.90	74	7.28	185	4.92	125	6.04	153	2.11	0.96

NIBCO Press System ball valves are designed to meet MSS SP-110 with the exception of the end connection. Ball valves are down-rated from 600 PSI CWP to 250 PSI CWP to match the Press System. Male and female press-to-connect ends are new technology not yet covered in the current edition of this specification.



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

AHEAD OF THE FLOW[®]



Lead-Free Three Piece Bronze Ball Valves

Features: Silicon Performance Bronze® Alloy ● Three-Piece Body ● Full Port ●

Blowout-Proof Stem

Approvals: MSS SP-110/145 • NSF/ANSI/CAN 61/372-8 Commercial Hot 180°F

Size range: 1/4" - 2-1/2"

Pressure rating: 600 PSI non-shock cold working pressure

Maximum pressure / temperature: 100 PSI at 300° F

Lead-free markings: Double oval in body casting, white handle and blue hang tag



T-595-Y-LF Threaded





Dezincification

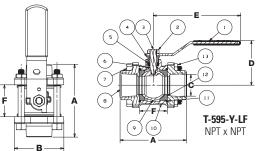
Resistant

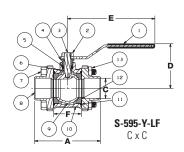
S-595-Y-LF Solder

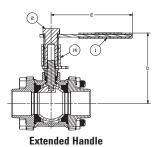
MATERIAL LIST

		_
	PART	SPECIFICATION
1.	Handle	Steel, Plated Plastisol Coated
2.	Handle Nut	Zinc Plated Steel
3.	Stem	Silicon Bronze ASTM B371 Alloy C69300
4.	Threaded Pack Gland	Brass ASTM B16 Alloy C36000
5.	Packing	PTFE
6.	Thrust Washer	Reinforced PTFE
7.	Body Bolts	Zinc Dichromate Plated Steel ASTM A449 Grade 5
8.	Body End (2)	Silicon Bronze ASTM B584 Alloy C87850
9.	Ball	Silicon Bronze ASTM B283 Alloy C69300
		or Stainless Steel ASTM A276 Type 316
10.	Body	Silicon Bronze ASTM B584 Alloy C87850
11.	O-Ring Seal (2)	FKM
12.	Seat Ring (2)	PTFE
13.	Body Nuts	Zinc Dichromate Plated Steel ASTM A449 Grade 5
14.	Handle Sleeve	Zinc Plated Steel

Note: valves are static grounded by a grounding washer. (Not Shown)







Representation for Suffix -EL

DIMENSIONS—WEIGHTS—QUANTITIES

			Dimensions																					
		T-595	-Y-LF		95-Y-L				_			w/E	w/ Extended Handle											
Si	ze		<u>A</u> <u>A</u>			<u> </u>		<u> </u>		D		<u> </u>		<u>E</u>		t_			T-595-Y-LF S-595-			Master		
<u>In.</u>	mm.	<u>1. In. mm.</u>		ln.	mm.	ln.	mm.	ln.	mm.	nm. In. mm.		In. mm.		ln.	In. mm. In. mm.		mm.	In. mm.		Lbs.	Kg.	Lbs. Kg. C		Ctn. Oty.
1/4	8	2.50	64	1.69	43	1.81	46	.38	10	1.69	43	2.80	71	3.82	97	3.91	99	.875	22.2	1.03	.47	.89	.40	50
3/8	10	2.50	64	1.81	46	1.81	46	.38	10	1.69	43	2.79	71	3.82	97	3.91	99	.875	22.2	.98	.44	.89	.40	50
1/2	15	2.50	64	2.06	52	1.81	46	.50	13	1.69	43	2.79	71	3.82	97	3.91	99	.875	22.2	1.03	.47	.89	.40	50
3/4	20	3.00	76	2.94	75	1.94	49	.75	19	2.00	51	3.13	79	3.82	97	4.66	118	1.190	27.9	1.70	.77	1.59	.72	30
1	25	3.69	94	3.66	93	2.50	64	1.00	25	2.25	57	3.32	84	3.82	97	4.66	118	1.563	39.7	2.82	1.28	2.55	1.15	20
1 1/4	32	4.09	104	3.91	99	2.69	68	1.25	32	2.75	70	3.83	97	5.45	138	6.69	170	1.750	44.5	3.96	1.80	3.61	1.64	10
1 1/2	40	4.56	116	4.60	117	3.00	76	1.50	38	2.97	75	4.06	103	5.45	138	6.69	170	2.125	53.9	5.68	2.57	5.31	2.41	10
2	50	6.16	156	5.78	147	4.00	102	2.00	51	3.63	92	4.30	109	5.45	138	6.69	170	2.640	67.1	11.40	5.17	10.60	4.81	4
2 1/2	65	6.84	174	6.94	176	5.00	127	2.50	64	4.09	104	5.51	140	8.03	204	8.00	203	3.463	88	21.07	9.56	19.30	8.75	2



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Lead-Free Three Piece Bronze Ball Valves

Features: Silicon Performance Bronze® Alloy ● Three-Piece Body ● Full Port ● 316SS Trim • Blowout-Proof Stem • Vented Ball

Approvals: MSS SP-110/145 ● NSF/ANSI/CAN 61/372-8 Commercial Hot 180°F

Size range: 1/4" - 2-1/2"

Pressure rating: 600 PSI non-shock cold working pressure

Maximum pressure / temperature: 100 PSI at 300° F

Lead-free markings: Double oval in body casting, white handle and blue hang tag







MATERIAL LIST

	1417	THE LIGHT
	PART	SPECIFICATION
1.	Handle	Steel, Plated Plastisol Coated
2.	Handle Nut	Stainless Steel 300 Series
3.	Stem	Stainless Steel ASTM A276 Type 316
4.	Threaded Pack Gland	Brass ASTM B16 Alloy C36000
5.	Packing	PTFE
6.	Thrust Washer	Reinforced PTFE
7.	Body Bolts	Zinc Dichromate Plated Steel ASTM A449 Grade 5
8.	Body End (2)	Silicon Bronze ASTM B584 Alloy C87850
9.	Ball (Vented)	Stainless Steel ASTM A276 Type 316
10.	Body	Silicon Bronze ASTM B584 Alloy C87850
11.	O-Ring Seal (2)	FKM
12.	Seat Ring (2)	PTFE
13.	Body Nuts	Zinc Dichromate Plated Steel ASTM A449 Grade 5

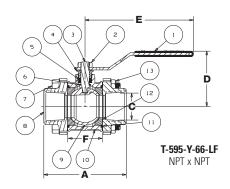


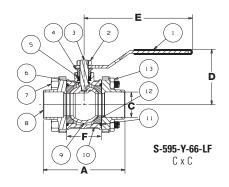


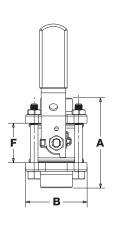
T-595-Y-66-LF Threaded

S-595-Y-66-LF Solder

Note: valves are static grounded by a grounding washer (not shown).







DIMENSIONS—WEIGHTS—QUANTITIES

T-595-Y-66-LF S-595-Y-66-LF								Dimer	sions	3									
Si	Size A			A			В	C)		E	F	T-595-\	/-66-LF	S-595-Y	Y-66-LF	Master
ln.	mm.	In.	mm.	ln.	mm.	In.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	In. mm.	Lbs.	Kg.	Lbs.	Kg.	Ctn. Qty.
1/4	8	2.50	64	1.69	43	1.81	46	.38	10	1.69	43	3.91	99	.875 22.2	1.03	.47	.89	.40	50
3/8	10	2.50	64	1.81	46	1.81	46	.38	10	1.69	43	3.91	99	.875 22.2	.98	.44	.89	.40	50
1/2	15	2.50	64	2.06	52	1.81	46	.50	13	1.69	43	3.91	99	.875 22.2	1.03	.47	.89	.40	50
3/4	20	3.00	76	2.94	75	1.94	49	.75	19	2.00	51	4.66	118	1.190 27.9	1.70	.77	1.59	.72	30
_1	25	3.69	94	3.66	93	2.50	64	1.00	25	2.25	57	4.66	118	1.563 39.7	2.82	1.28	2.55	1.15	20
1 1/4	32	4.09	104	3.91	99	2.69	68	1.25	32	2.75	70	6.69	170	1.750 44.5	3.96	1.80	3.61	1.64	10
1 1/2	40	4.56	116	4.60	117	3.00	76	1.50	38	2.97	75	6.69	170	2.125 53.9	5.68	2.57	5.31	2.41	10
2	50	6.16	156	5.78	147	4.00	102	2.00	51	3.63	92	6.69	170	2.640 67.1	11.40	5.17	10.60	4.81	4
2 1/2	65	6.84	174	6.94	176	5.00	127	2.50	64	4.09	104	8.00	203	3.463 88	21.07	9.56	19.30	8.75	2

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov. LEAD-FREE: Weighted average lead content ≤ 0.25%



NIBCO® Press Lead-Free Three Piece Bronze Ball Valves

Features: Silicon Performance Bronze® Alloy ● Three-Piece Body ● Press Ends Leak Detection ●

Full Port • Blowout-Proof Stem

Approvals: MSS SP-110/145 • NSF/ANSI/CAN 61/372-8 Commercial Hot 180°F

Size range: 1/2" - 2-1/2"

Pressure rating: 250 psi non-shock cold working pressure*
Maximum pressure / temperature: 225 psi at 250° F*

Lead-free markings: Double oval in body casting, white handle and blue hang tag

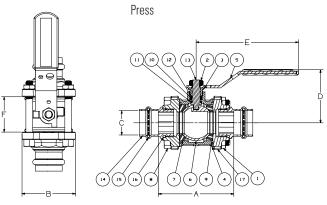


MATERIAL LIST

		WAI LNIAL LIST									
	PART	SPECIFICATION									
1.	Dady Nuta	Zinc Dichromate Plated Steel									
1.	Body Nuts	ASTM A449 Grade 5									
2.	Handle Nut	Zinc Plated Steel									
3.	Threaded Pack Gland	Brass ASTM B16 Alloy C36000									
4.	Body	Silicon Bronze ASTM B584 Alloy C87850									
5.	Body End (2)	Silicon Bronze ASTM B584 Alloy C87850									
6.	Handle	Steel, Plated Plastisol Coated									
		DZR Brass SAE J461 C46500 (¼"-1")									
7.	Ball	Stainless Steel ASTM A276 S31600 or ASTM A351 CF8M (11/4"-21/2")									
8.	Seats (2)	PTFE "Y" or RPTFE "R" Glass Reinforced									
9.	Dody Dolto	Zinc Dichromate Plated Steel									
J.	Body Bolts	ASTM A449 Grade 5									
10.	0-ring (2)	FKM									
11.	Grounding Washer	Stainless Steel- ASTM A-167 304									
12.	Thrust Washer	Reinforced PTFE									
13.	Stem Packing	PTFE									
14.	Stem	Silicon Bronze ASTM B371 Alloy C69300									
15.	Press End Adapter (2)	Wrot Copper ASTM B75 Alloy C12200									
16.	O-Ring (2)	EPDM (Leak Detection)									
17.	Boss Seal O-ring (2)	EPDM									



PC-595-Y-LF PC-595-R-LF



DIMENSIONS - WEIGHTS - QUANTITIES

Size	A		В		С			D		E		F	Weights		Master	
In.	ln.	mm.	ln.	mm.	In.	mm.	In.	mm.	ln.	mm.	ln.	mm.	lbs.	kg	Ctn. Qty.	
1/2"	2.482	63	1.794	46	0.629	16	1.942	49	3.96	101	0.968	25	1.14	0.52	40	
3/4"	3.048	77	1.991	51	0.881	22	2.277	58	4.762	121	1.281	33	1.91	0.87	25	
1"	3.505	89	2.484	63	1.132	29	2.469	63	4.762	121	1.643	42	2.84	1.29	15	
11/4"	3.758	95	2.718	69	1.382	35	3.092	79	6.75	171	1.83	46	4.36	1.98	10	
1½"	4.24	108	3.045	77	1.633	41	3.335	85	6.75	171	2.205	56	5.73	2.60	8	
2"	6.404	163	4.042	103	2.134	54	3.556	90	6.75	171	2.72	69	11.12	5.04	4	
2½"	7.071	180	5.09	129	2.631	67	4.322	110	8.06	205	3.513	89	18.79	8.52	2	

*200 PSI CWP and 200 PSI at 200°F for 21/2" and above



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.





NIBCO® Press Lead-Free Three Piece Bronze Ball Valves

Features: Silicon Performance Bronze[®] Alloy • Three-Piece Body • Press Ends Leak Detection • Stainless Steel Trim • Full Port • Blowout-Proof Stem

Approvals: MSS SP-110/145 • NSF/ANSI/CAN 61/372-8 Commercial Hot 180°F

Size range: 1/2" - 2-1/2"

Pressure rating: 250 psi non-shock cold working pressure*

Maximum pressure / temperature: 225 psi at 250° F*

Lead-free markings: Double oval in body casting, white handle and blue hang tag



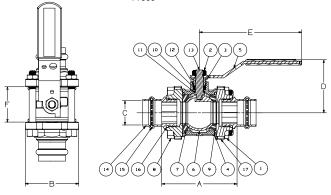
MATERIAL LIST

PART SPECIFICATION 1. Body Nuts Zinc Dichromate Plated Steel 2. Handle Nut Zinc Plated Steel 3. Threaded Pack Gland Brass ASTM B16 Alloy C36000 4. Body Silicon Bronze ASTM B584 Alloy C87850 5. Body End (2) Silicon Bronze ASTM B584 Alloy C87850 6. Handle Steel, Plated Plastisol Coated 7. Ball Stainless Steel ASTM A276 Type S31600 8. Seats (2) PTFE "Y" or RPTFE "R" Glass Reinforced 2inc Dichromate Plated Steel ASTM A449 Grade 5 10. O-ring (2) FKM 11. Grounding Washer Stainless Steel- ASTM A-167 304	
1. Body Nuts 2. Handle Nut Zinc Plated Steel 3. Threaded Pack Gland Brass ASTM B16 Alloy C36000 4. Body Silicon Bronze ASTM B584 Alloy C87850 5. Body End (2) Silicon Bronze ASTM B584 Alloy C87850 6. Handle Steel, Plated Plastisol Coated 7. Ball Stainless Steel ASTM A276 Type S31600 8. Seats (2) PTFE "Y" or RPTFE "R" Glass Reinforced 2 Zinc Dichromate Plated Steel ASTM A449 Grade 5 ASTM A449 Grade 5 10. O-ring (2) FKM 11. Grounding Washer Stainless Steel- ASTM A-167 304	
2. Handle Nut Zinc Plated Steel 3. Threaded Pack Gland Brass ASTM B16 Alloy C36000 4. Body Silicon Bronze ASTM B584 Alloy C87850 5. Body End (2) Silicon Bronze ASTM B584 Alloy C87850 6. Handle Steel, Plated Plastisol Coated 7. Ball Stainless Steel ASTM A276 Type S31600 8. Seats (2) PTFE "Y" or RPTFE "R" Glass Reinforced 9. Body Bolts Zinc Dichromate Plated Steel ASTM A449 Grade 5 ASTM A449 Grade 5 10. O-ring (2) FKM 11. Grounding Washer Stainless Steel- ASTM A-167 304	
3. Threaded Pack Gland Brass ASTM B16 Alloy C36000 4. Body Silicon Bronze ASTM B584 Alloy C87850 5. Body End (2) Silicon Bronze ASTM B584 Alloy C87850 6. Handle Steel, Plated Plastisol Coated 7. Ball Stainless Steel ASTM A276 Type S31600 8. Seats (2) PTFE "Y" or RPTFE "R" Glass Reinforced 2. Zinc Dichromate Plated Steel ASTM A449 Grade 5 ASTM A449 Grade 5 10. O-ring (2) FKM 11. Grounding Washer Stainless Steel- ASTM A-167 304	
4. Body Silicon Bronze ASTM B584 Alloy C87850 5. Body End (2) Silicon Bronze ASTM B584 Alloy C87850 6. Handle Steel, Plated Plastisol Coated 7. Ball Stainless Steel ASTM A276 Type S31600 8. Seats (2) PTFE "Y" or RPTFE "R" Glass Reinforced 2. Jinc Dichromate Plated Steel ASTM A449 Grade 5 10. O-ring (2) FKM 11. Grounding Washer Stainless Steel- ASTM A-167 304	
5. Body End (2) Silicon Bronze ASTM B584 Alloy C87850 6. Handle Steel, Plated Plastisol Coated 7. Ball Stainless Steel ASTM A276 Type S31600 8. Seats (2) PTFE "Y" or RPTFE "R" Glass Reinforced 2 Zinc Dichromate Plated Steel ASTM A449 Grade 5 ASTM A449 Grade 5 10. O-ring (2) FKM 11. Grounding Washer Stainless Steel- ASTM A-167 304	
6. Handle Steel, Plated Plastisol Coated 7. Ball Stainless Steel ASTM A276 Type S31600 8. Seats (2) PTFE "Y" or RPTFE "R" Glass Reinforced 9. Body Bolts Zinc Dichromate Plated Steel ASTM A449 Grade 5 FKM 11. Grounding Washer Stainless Steel- ASTM A-167 304	
7. Ball Stainless Steel ASTM A276 Type S31600 8. Seats (2) PTFE "Y" or RPTFE "R" Glass Reinforced 9. Body Bolts Zinc Dichromate Plated Steel ASTM A449 Grade 5 FKM 11. Grounding Washer Stainless Steel- ASTM A-167 304	
8. Seats (2) PTFE "Y" or RPTFE "R" Glass Reinforced 9. Body Bolts Zinc Dichromate Plated Steel ASTM A449 Grade 5 FKM 11. Grounding Washer Stainless Steel- ASTM A-167 304	
9. Body Bolts Zinc Dichromate Plated Steel 10. 0-ring (2) FKM 11. Grounding Washer Stainless Steel- ASTM A-167 304	
9. Body Bolts ASTM A449 Grade 5 10. O-ring (2) FKM 11. Grounding Washer Stainless Steel- ASTM A-167 304	
10. O-ring (2) FKM 11. Grounding Washer Stainless Steel- ASTM A-167 304	
11. Grounding Washer Stainless Steel- ASTM A-167 304	
12. Thrust Washer Reinforced PTFE	
13. Stem Packing PTFE	
14. Stem Stainless Steel ASTM A276 Type 316	
15. Press End Adapter (2) Wrot Copper ASTM B75 Alloy C12200	
16. O-Ring (2) EPDM (Leak Detection)	
17. Boss Seal O-ring (2) EPDM	



PC-595-Y-66-LF PC-595-R-66-LF

Press



DIMENSIONS - WEIGHTS - QUANTITIES

Size		<u> </u>		3		;)					Wei	ghts	Master
ln.	In.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	In.	mm.	ln.	mm.	lbs.	kg	Ctn. Qty.
1/2"	2.482	63	1.794	46	0.629	16	1.942	49	3.96	101	0.968	25	1.14	0.52	40
3/4"	3.048	77	1.991	51	0.881	22	2.277	58	4.762	121	1.281	33	1.91	0.87	25
1"	3.505	89	2.484	63	1.132	29	2.469	63	4.762	121	1.643	42	2.84	1.29	15
1¼"	3.758	95	2.718	69	1.382	35	3.092	79	6.75	171	1.83	46	4.36	1.98	10
1½"	4.24	108	3.045	77	1.633	41	3.335	85	6.75	171	2.205	56	5.73	2.60	8
2"	6.404	163	4.042	103	2.134	54	3.556	90	6.75	171	2.72	69	11.12	5.04	4
2½"	7.071	180	5.09	129	2.631	67	4.322	110	8.06	205	3.513	89	18.79	8.52	2

*200 PSI CWP and 200 PSI at 200°F for 21/2" and above



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



NIBCO® Press System Lead-Free Bronze Gate Valves

Features: Silicon Performance Bronze[®] Alloy • Screw-In Bonnet • Rising Stem • Conforms to MSS SP-139 • Solid Wedge • Press Ends Leak Detection

Approvals: NSF/ANSI/CAN 61/372-8 Commercial Hot 180°F (includes annex F)

Size range: 1/2" - 3"

Pressure rating: 250* PSI non-shock cold working pressure

Maximum pressure / temperature: 180 PSI at 200° F

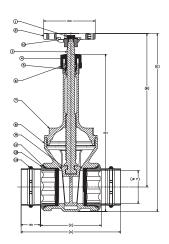
Lead-free markings: Double oval in body casting, white handle and blue hang tag



MATERIAL LIST

	PART	SPECIFICATION
1.	Handwheel Nut	300 Series Stainless Steel
2.	Handwheel	Malleable Iron ASTM A47, 35018
3.	Stem	Silicon Bronze ASTM B371 Alloy C69430
4.	Packing Gland	ASTM B16 C36000
5.	Stem Packing	Aramid Fibers with Graphite
6.	Packing Nut	ASTM B16 C36000
7.	Bonnet	Silicon Bronze ASTM B584 Alloy C87850
8.	Body	Silicon Bronze ASTM B584 Alloy C87850
9.	Wedge	Silicon Bronze ASTM B584 Alloy C87850
10.	Identification Plate	Aluminum
11.	Boss seal o-ring (2)	EPDM
12.	Press End Adapter (2)	Wrot Copper ASTM B75 Alloy C12200
13.	Leak Detect O-Ring (2)	EPDM





PC-111-LF Press x Press Female End

DIMENSIONS—WEIGHTS—QUANTITIES

	IZE		Α		<u>B</u>		C)				<u> </u>		G		<u>H</u>	We	ight	Master
ln.	mm.	ln.	mm.	In.	mm.	ln.	mm.	In.	mm.	ln.	mm.	In.	mm.	In.	mm.	ln.	mm.	Lbs.	Kg.	Ctn Qty.
1/2	15	3.68	93.47	4.85	123	2.28	57.9	3.92	100	4.82	122	0.5	13	0.7	17.78	2.44	62	0.96	0.43	50
3/4	20	4.28	108.7	5.89	150	2.36	60	4.93	125	5.74	146	0.75	19	0.96	24	2.44	62	1.38	0.62	25
1	25	4.62	117.3	7.21	183	2.85	72.4	5.95	151	6.93	176	1.00	25	0.88	22.35	3.19	81	2.18	0.99	20
1-1/	32	5.1	129.5	8.20	208	3.08	78.23	6.69	170	7.84	199	1.25	32	1.01	25.65	3.19	81	3.15	1.43	10
1-1/	40	6.18	157	9.40	239	3.41	86.6	7.51	191	8.94	227	1.50	38	1.38	35	4.42	112.3	4.5	2.04	10
2	50	6.44	163.6	11.54	293	3.42	86.9	9.65	245	10.84	275	2.00	51	1.51	38.3	4.42	112.3	6.7	3.04	4
2-1/2	[‡] 65	7.56	192	14.4	366	4.62	117.3	11.86	301	13.52	343	2.50	64	1.47	37.3	4.42	112.3	11.9	5.4	4
3 [‡]	80	8.49	215.6	16.6	422	5.17	131.3	13.89	353	15.65	398	3.00	76	1.66	42.2	5.28	134.1	18.6	8.44	4

[†]No packing gland, packing only in this size.

^{* 200} PSI for 21/2" and 3"



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Lead-Free Bronze Gate Valves

Features: Silicon Performance Bronze® Alloy • Screw-In Bonnet • Rising Stem • Solid Wedge

Approvals: Conforms to MSS SP-139 •

NSF/ANSI/CAN 61/372-8 Commercial Hot 180°F (includes annex F)

Size range: 1/4" - 3"

PART

3. Handwheel

5. Packing Nut

6. Packing Gland

7. Packing

8. Bonnet

Wedge

9. Body

10.

4. Stem

1. Handwheel Nut

2. Identification Plate

NIBC

Pressure rating: 300 PSI non-shock cold working pressure

Maximum pressure / temperature: 100 PSI at 300° F

MATERIAL LIST

Aluminum

SPECIFICATION

300 Series Stainless Steel

Malleable Iron ASTM A47

or ASTM B99 Alloy C65100

Bronze ASTM B62 or ASTM B584

Alloy C84400 or Brass ASTM B16 Bronze ASTM B62 or ASTM B584

Alloy C84400 or Brass ASTM B16

Aramid Fibers with Graphite

Lead-free markings: Double oval in body casting, white handle and blue hang tag

Silicon Bronze ASTM B371 Alloy C69430

Silicon Bronze ASTM B584 Alloy C87850

Silicon Bronze ASTM B584 Alloy C87850

Silicon Bronze ASTM B584 Alloy C87850









SI	ZE		٩	E	3		<u> </u>)		<u> </u>		F		<u> </u>	T-11	1-LF	Master
In.	mm.	In.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Ctn Qty.
1/4⁺	8	1.68	43	5.12	130	0.88	22	3.62	92	4.54	115	0.31	8	0.38	10	0.75	0.34	50
3/8⁺	10	1.68	43	5.20	132	0.84	21	3.62	92	4.56	116	0.38	10	0.42	11	0.72	0.33	50
1/2⁺	15	1.94	49	4.85	123	0.86	22	3.92	100	4.82	122	0.5	13	0.54	14	0.83	0.38	50
3/4	20	2.06	52	5.89	150	0.92	23	4.93	125	5.74	146	0.75	19	0.57	14	1.13	0.51	50
1	25	2.44	62	7.21	183	1.04	26	5.95	151	6.93	176	1.00	25	0.70	18	1.88	0.86	30
1-1/4	32	2.62	67	8.20	208	1.20	30	6.69	170	7.84	199	1.25	32	0.71	18	2.53	1.15	20
1-1/2	40	2.88	73	9.40	239	1.38	35	7.51	191	8.94	227	1.50	38	0.75	19	3.57	1.62	10
2	50	3.06	78	11.54	293	1.48	38	9.65	245	10.84	275	2.00	51	0.79	20	5.28	2.39	10
2-1/2	65	4.12	105	14.40	366	1.84	47	11.86	301	13.52	343	2.50	64	1.14	29	10.26	4.66	5
3	80	4.50	114	16.60	422	2.10	53	13.89	353	15.65	398	3.00	76	1.20	30	14.72	6.67	4
-									_		_		_				4 1 5	

SI	ZE		4		3	(D		Ε		F		G	S-11	1-LF	Master
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Ctn Qty.
1/2†	15	1.75	44	5.46	139	0.75	19	3.88	99	4.80	122	0.50	13	0.50	13	0.69	0.31	50
3/4	20	2.38	60	5.89	150	0.88	22	4.93	125	5.74	146	0.75	19	0.75	19	1.02	0.47	50
1	25	2.82	72	7.21	183	1.00	25	5.87	149	6.85	174	1.00	25	0.91	23	1.68	0.76	30
1-1/4	32	3.12	79	8.20	208	1.18	30	6.69	170	7.84	199	1.25	32	0.97	25	2.39	1.08	20
1-1/2	40	3.42	87	9.40	239	1.24	31	7.48	190	8.91	226	1.50	38	1.09	28	3.25	1.47	10
2	50	4.00	102	11.54	293	1.31	33	9.60	244	10.78	274	2.00	51	1.34	34	4.97	2.25	10

†No packing gland, packing only in this size.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov. LEAD-FREE: Weighted average lead content ≤ 0.25%

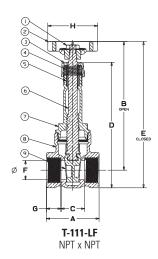


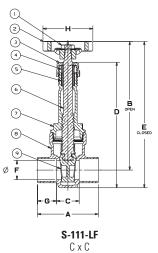






S-111-LF Solder







NIBCO® Press System Lead-Free Bronze Gate Valves

Features: Silicon Performance Bronze® Alloy • Screw-In Bonnet • Non-Rising Stem •

Press Ends Leak Detection • Solid Wedge

Approvals: Conforms to MSS SP-139 •

NSF/ANSI/CAN 61/372-8 Commercial Hot 180°F (includes annex F)

Size range: 1/2" - 3"

Pressure rating: 250[†] PSI non-shock cold working pressure

Maximum pressure / temperature: 180 PSI at 200° F

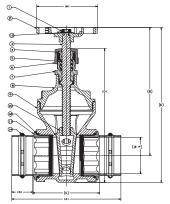
Lead-free markings: Double oval in body casting, white handle and blue hang tag



MATERIAL LIST

	PART	SPECIFICATION
1.	Handwheel Nut	300 Series Stainless Steel
2.	Handwheel	Malleable Iron ASTM A47, 35018
3.	Stem	Silicon Bronze ASTM B371 Alloy C69430
4.	Packing Gland	ASTM B16 C36000
5.	Stem Packing	Aramid Fibers with Graphite
6.	Packing Nut	ASTM B16 C36000
7.	Stuffing Box	Silicon Bronze ASTM B584 Alloy C87850
8.	Bonnet	Silicon Bronze ASTM B584 Alloy C87850
9.	Body	Silicon Bronze ASTM B584 Alloy C87850
10.	Wedge	Silicon Bronze ASTM B584 Alloy C87850
11.	Identification Plate	Aluminum
12.	Boss seal o-ring (2)	EPDM
13.	Press End Adapter (2)	Wrot Copper ASTM B75 Alloy C12200
14.	Leak Detect O-Ring (2)	EPDM





PC-113-LF Press x Press Female End

DIMENSIONS—WEIGHTS—QUANTITIES

SI	ZE		A		В		C		D		E		F		G		H	Wei	ight	Master
In.	mm.	In.	mm.	ln.	mm.	ln.	mm.	In.	mm.	In.	mm.	ln.	mm.	In.	mm.	ln.	mm.	Lbs.	Kg.	Ctn Qty.
1/2 †	15	3.68	93.47	3.66	93	2.28	57.9	3.34	84.84	4.24	107.7	0.5	13	0.7	17.78	2.44	62	0.91	0.41	30
3/4	20	4.24	107.7	3.94	100	2.36	59.9	3.85	97.8	4.64	118	0.75	19	0.96	24	2.44	62	1.28	0.58	25
1	25	4.62	117.3	4.62	117.3	2.85	72.4	4.69	119	5.52	140	1.00	25	0.88	22.35	3.19	81	2.09	0.95	20
1-1/4	32	5.1	129.5	5.19	132	3.08	78.2	5.26	133.6	6.25	159	1.25	32	1.01	25.65	3.19	81	3.03	1.37	10
1-1/2	40	6.18	157	6.3	160	3.41	86.6	6.07	154.2	7.5	191	1.50	38	1.38	35	4.42	112.3	4.18	1.9	10
2	50	6.44	163.6	7.09	180	3.42	86.9	7.33	186.2	8.59	218	2.00	51	1.51	38.3	4.42	112.3	6.1	2.77	4
2-1/2‡	65	7.56	192	8.88	226	4.62	117.3	9.28	235.7	10.69	272	2.50	64	1.47	37.3	4.42	112.3	11.2	5.08	4
3 [‡]	80	8.49	215.6	10.24	2.6	5.17	131.3	10.71	272	12.5	318	3.00	76	1.66	42.2	5.28	134.1	17.37	7.89	4

†No packing gland, packing only in this size.

‡200 PSI for 2 1/2" and 3"



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.





Lead-Free Bronze Gate Valves

Features: Silicon Performance Bronze® Alloy • Screw-In Bonnet • Non-Rising Stem • Solid Wedge

Approvals: Conforms to MSS SP-139 •

NSF/ANSI/CAN 61/372-8 Commercial Hot 180°F (includes annex F)

Size range: 1/4" - 3"

Pressure rating: 300 PSI non-shock cold working pressure

Maximum pressure / temperature: 100 PSI at 300° F

Lead-free markings: Double oval in body casting, white handle and blue hang tag

MATERIAL LIST

	WALLING LIST											
	PART	SPECIFICATION										
1.	Handwheel Nut	300 Series Stainless Steel										
2.	Identification Plate	Aluminum										
3.	Handwheel	Malleable Iron ASTM A47 (T-113)										
4.	Stem	ASTM B99 Alloy C65100										
5.	Packing Nut	Bronze ASTM B62 or ASTM B584 Alloy C84400 or Brass ASTM B16										
6.	Packing Gland	Bronze ASTM B62 or ASTM B584 Alloy C84400 or Brass ASTM B16										
7.	Packing	Aramid Fibers with Graphite										
8.	Stuffing Box	Silicon Bronze ASTM B584 Alloy C87850										
9.	Bonnet	Silicon Bronze ASTM B584 Alloy C87850										
10.	Body	Silicon Bronze ASTM B584 Alloy C87850										
11.	Wedge	Silicon Bronze ASTM B584 Alloy C87850										



T-113-LF Threaded

DIMENSIONS—WEIGHTS—QUANTITIES

SI	ZE		4	E	3	(;)		<u> </u>		F		1	T-11	3-LF	Master
In.	mm.	In.	mm.	ln.	mm.	In.	mm.	ln.	mm.	ln.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Ctn Qty.
1/4⁺	8	1.68	43	3.44	87	0.88	22	3.06	78	3.95	100	0.4	10	1.95	50	0.70	0.31	50
3/8†	10	1.68	43	3.44	87	0.84	21	3.95	100	3.95	100	0.42	11	1.95	50	0.67	0.30	50
1/2⁺	15	1.94	49	3.66	93	0.88	22	4.24	108	4.24	108	0.54	14	1.95	50	0.78	0.35	50
3/4	20	2.06	52	3.94	100	0.92	23	4.64	118	4.64	118	0.57	14	1.95	50	1.00	0.48	50
1	25	2.44	62	4.62	117	1.04	26	5.52	140	5.52	140	0.7	18	2.56	65	1.73	0.78	30
1-1/4	32	2.62	67	5.19	132	1.21	31	6.25	159	6.25	159	0.7	18	2.56	65	2.28	1.04	20
1-1/2	40	2.88	73	6.3	160	1.38	35	7.5	191	7.5	191	0.75	19	3.55	90	3.33	1.51	10
2	50	3.06	78	7.09	180	1.48	38	8.59	218	8.59	218	0.79	20	3.55	90	4.68	2.13	10
2-1/2	65	4.12	105	8.88	226	1.84	47	10.69	272	10.69	272	1.14	29	3.55	90	9.46	4.29	5
3	80	4.5	114	10.24	260	2.1	53	12.5	318	12.5	318	1.2	30	4.23	107	13.70	6.20	4

SI	ZE		Α	Е	3	(D		E		F		Н	S-11	3-LF	Master
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Ctn Qty.
1/2†	15	1.76	45	3.66	93	0.75	19	3.26	83	4.16	106	0.5	13	2.08	53	0.69	0.29	50
3/4	20	2.38	60	3.84	98	0.88	22	3.7	94	4.53	115	0.75	19	2.08	53	0.94	0.43	50
1	25	2.82	72	4.66	118	1	25	4.57	116	5.5	140	0.91	23	2.64	67	1.50	0.68	30
1-1/4	32	3.12	79	5.01	127	1.18	30	5.16	131	6.05	154	0.97	25	2.8	71	2.14	0.97	20
1-1/2	40	3.42	87	6.2	157	1.24	31	6	152	7.37	187	1.09	28	3.83	97	3.01	1.37	10
2	50	4	102	7.06	179	1.31	33	7.24	184	8.52	216	1.34	34	4.69	119	4.40	1.99	10

†No packing gland, packing only in this size.



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

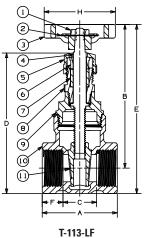




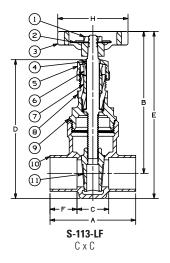




S-113-LF Solder



NPT x NPT





Lead-Free Bronze Check Valves

Features: Silicon Performance Bronze® Alloy ● Horizontal Swing ● Regrinding Type ●

Y-Pattern • Renewable Seat and Disc

Approvals: Conforms to MSS SP-139 •

NSF/ANSI/CAN 61/372-8 Commercial Hot 180°F (includes annex F)

Size Range: 1/4" - 2"

Pressure Rating: 200 PSI Non-Shock Cold Working Pressure Maximum Pressure / Temperature: 100 PSI at 300° F

Lead-free marking: Double oval in body casting



		WAI LNIAL LIST
	PART	SPECIFICATION
1.	Hinge Pin	316SS or 304SS
2.	Hinge Pin Plug	Silicon Bronze ASTM B283 Alloy C69300
3.	Bonnet	Silicon Bronze ASTM B584 Alloy C87850
4.	Nut (2)	316SS or 304SS
5.	Disc Hanger	Silicon Bronze ASTM B584 Alloy C87850 or MPIF SS-316NI-25
6.	Seat Disc	PTFE
7.	Seat Disc Washer *	304SS or 316SS
8.	Disc Holder	Silicon Bronze ASTM B283 Alloy C69300
9.	Body	Silicon Bronze ASTM B584 Alloy C87850

^{*}Sizes 34", 1", 11/4", 11/2" and 2" only. No Seat Disc Washers on 1/2" and 3/4" with PTFE (Y) discs.



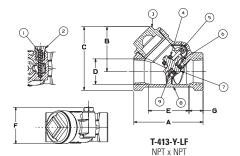


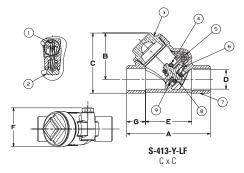


T-413-Y-LF Threaded



S-413-Y-LF Solder





DIMENSIONS—WEIGHTS—QUANTITIES

SI	ZE		A		В		C		D	E		F		G		T-413-Y-LF		Master
In.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Ctn Qty.
1/4	8	2.12	53.85	1.31	33.27	1.37	34.79	0.67	17	1.57	40	1.401	27	0.26	7	0.508	0.23	50
3/8	10	2.12	53.85	1.31	33.27	1.31	33.27	0.67	17	1.40	36	1.401	27	0.35	9	0.478	0.22	50
1/2	15	2.44	62	1.66	42	2.31	59	0.81	21	1.61	41	1.401	33	0.42	11	0.55	0.25	50
3/4	20	2.9	74	1.88	48	2.67	68	1.04	26	2.06	52	1.702	40	0.42	11	0.90	0.41	50
1	25	3.56	90	2.27	58	3.29	84	1.26	32	2.44	62	1.953	52	0.55	14	1.46	0.66	30
1-1/4	32	4.18	106	2.73	69	3.93	100	1.59	40	3.00	76	2.179	60	0.59	15	2.17	0.99	20
1-1/2	40	4.48	114	3.08	78	4.44	113	1.86	47	3.39	86	2.430	70	0.57	13	2.95	1.34	10
2	50	5.29	134	3.84	98	5.48	139	2.29	58	3.74	95	3.067	83	0.76	19	4.79	2.17	10

SI	ZE		A		3)		<u> </u>	F	:		<u> </u>	S-413	-Y-LF	Master
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Ctn Qty.
1/4	8	2.12	53.85	1.31	33.27	1.37	34.79	0.67	17	1.57	40	1.401	27	0.26	7	0.508	0.23	50
3/8	10	2.12	53.85	1.31	33.27	1.31	33.27	0.67	17	1.40	36	1.401	27	0.35	9	0.478	0.22	50
1/2	15	2.52	64	1.540	42	1.940	49	0.54	14	1.52	39	1.416	20	0.50	13	0.55	0.25	50
3/4	20	3.34	85	1.861	48	2.410	61	0.78	20	1.84	47	1.717	28	0.75	19	0.88	0.40	50
1	25	4.06	103	2.206	29	2.880	73	1.02	26	2.25	57	1.947	34	0.91	23	1.48	0.67	30
1-1/4	32	4.69	119	2.737	38	3.520	89	1.26	32	2.75	70	2.178	40	0.97	25	2.22	1.01	20
1-1/2	40	5.28	134	3.030	44	3.950	100	1.51	38	3.09	78	2.429	47	1.09	28	3.00	1.36	10
2	50	6.44	164	3.640	98	4.863	123	1.98	50	3.74	95	3.073	62	1.34	34	4.87	2.21	10

NIBCO check valves may be installed in both horizontal and vertical lines with upward flow or in any intermediate position. They will operate satisfactorily in a declining plane (no more than 15°). Install check valves as far from pump discharge or line direction change as possible and at a minimum length of 5 times the pipe diameter.

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WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Do not use for reciprocating air compressor service.



Lead-Free Bronze Check Valves

Features: Silicon Performance Bronze® Alloy • Horizontal Swing • Regrinding Type •

Y-Pattern • Renewable Seat and Disc • Press Ends

Approvals: Conforms to MSS SP-139 •

NSF/ANSI/CAN 61/372-8 Commercial Hot 180°F (includes annex F)

Size range: 1/2" - 2"

Pressure rating: 200 PSI non-shock cold working pressure

Maximum pressure / temperature: 100 PSI at 250° F

Lead-free marking: Double oval in body casting



	1417 (1	
	PART	SPECIFICATION
1.	Bonnet	Silicon Bronze ASTM B584 Alloy C87850
2.	Body	Silicon Bronze ASTM B584 Alloy C87850
3.	Hinge Pin	ASTM A276 Alloy S31600
		or ASTM A276 Alloy S30400
4.	Disc Hanger	Silicon Bronze ASTM B584 Alloy C87850
5.	Stainless Steel Nut (2)	ASTM F594 Alloy S31600
		or ASTM F594 Alloy S30400
6.	Disc Holder	Silicon Bronze ASTM B371 Alloy C69300
7.	Seat Disc	PTFE
8.	Hinge Pin Plug	ASTM B371 Alloy C69300
9.	Disc Washer *	304 Stainless Steel
10.	O-Ring	EPDM
11.	Press End Adapter	ASTM B75 Alloy C12200
12.	Crimp Evident Seal O-Ring	EPDM

^{*} Sizes 3/4", 1", 11/4", 11/2" and 2" only

DIMENSIONS—WEIGHTS

				Dimensi				
SI	ZE	A (Lay	Length)	В (не	eight)	Master	We	ight
ln.	mm.	ln.	mm.	ln.	mm.	Ctn Qty	Lbs.	Kg.
1/2	15	2.78	71	1.66	42	40	0.72	0.33
3/4	20	3.25	83	1.90	48	40	1.13	0.51
1	25	3.97	101	2.27	58	25	1.80	0.82
1-1/4	32	4.64	118	2.67	68	68 20		1.10
1-1/2	40	5.00	127	3.09	79	16	3.75	1.70
2	50	5.85	149	3.84	98	4	5.51	2.50

NIBCO check valves may be installed in both horizontal and vertical lines with upward flow or in any intermediate position. They will operate satisfactorily in a declining plane (no more than 15°). Install check valves as far from pump discharge or line direction change as possible and at a minimum length of 5 times the pipe diameter.

Do not use for reciprocating air compressor service.



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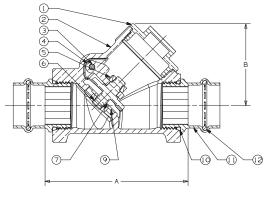








PC-413-Y-LF Press Ends



PC-413-Y-LF Press x Press



Lead-Free Bronze Ring Check® Valves

Features: Silicon Performance Bronze® Alloy • Inline Lift Type • Resilient Discs •

Spring Actuated

Approvals: Conforms to MSS SP-139 •

NSF/ANSI/CAN 61/372-8 Commercial Hot 180°F (includes annex F)

Size range: 1/2" - 2"

Pressure rating: 250 PSI non-shock cold working pressure

Maximum pressure / temperature: 100 PSI at 300° F

Lead-free marking: Double oval in body casting

MATERIAL LIST

PART	SPECIFICATION
1. Body	Silicon Bronze ASTM B584 Alloy C87600
2. Stem	Stainless Steel ASTM A582 Alloy S30300
3. Spring	Stainless Steel S31600
4. Disc Holder	Stainless Steel 18-8
5. Disc	PTFE
6. Seat Screw	Stainless Steel 18-8
7. Body End	Silicon Bronze ASTM B584 Alloy C87600

DIMENSIONS—WEIGHTS—QUANTITIES

SI	ZE		4	E	3	T-480	-Y-LF	Master
In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Ctn Qty.
1/2	15	2.09	53	1.57	40	0.36	0.16	100
3/4	20	2.18	55	1.86	47	0.48	0.22	100
1	25	2.59	66	2.36	60	0.77	0.35	50
11/4	32	2.83	72	2.68	68	1.14	0.51	30
11/2	40	3.15	80	3.06	78	1.63	0.74	30
2	50	3.71	94	3.72	94	2.27	1.03	10

SI	ZE		<u> </u>		3		;	S-480	-Y-LF	Master	
In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Ctn Qty.	
1/2	15	2.05	52	1.57	40	1.05	27	0.4	0.18	100	
3/4	20	2.62	67	1.86	47	1.13	29	0.52	0.24	100	
1	25	3.26	83	2.36	60	1.44	37	0.85	0.39	50	
11/4	32	3.51	89	2.68	68	1.57	40	1.28	0.58	30	
11/2	40	4.08	104	3.06	78	1.90	48	1.75	0.79	30	
2	50	4.90	124	3.72	94	2.22	56	2.7	1.23	10	

Sizes 1/2" thru 2" require 1/2 pound pressure to open.

NIBCO check valves may be installed in both horizontal and vertical lines with upward flow or in any intermediate position. They will operate satisfactorily in a declining plane (no more than 15°). Install check valves as far from pump discharge or line direction change as possible and at a minimum length of 5 times the pipe diameter.

Do not use for reciprocating air compressor service.



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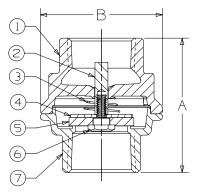




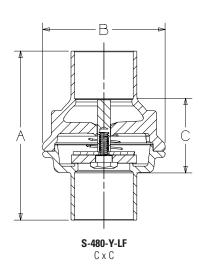
T-480-Y-LF

Threaded

S-480-Y-LF Solder



T-480-Y-LF NPT x NPT





Lead-Free Bronze Ring Check® Valves

Features: Silicon Performance Bronze® Alloy ● Inline Lift Type ● Resilient Discs ● Spring Actuated

Approvals: Conforms to MSS SP-139 •

NSF/ANSI/CAN 61/372-8 Commercial Hot 180°F (includes annex F)

Size range: 1/2" - 2"

Pressure rating: 250 PSI non-shock cold working pressure

Maximum pressure / temperature: 100 PSI at 300° F

Lead-free marking: Double oval in body casting



	PART S	PECIFICATION
1.	Spring	Stainless Steel S31600
2.	Seat Screw	Stainless Steel 18-8
3.	Stem	Stainless Steel ASTM A582 Alloy S30300
4.	Disk Holder	Stainless Steel 18-8
5.	Disk	(Y) PTFE (W) BUNA-N
6.	Press End Adapter	ASTM B75 Alloy C12200
7.	Crimp Evident Seal O-Ring	EPDM
8.	O-Ring	EPDM
9.	Body	Silicon Bronze ASTM B584 Alloy C87600
10.	Body End	Silicon Bronze ASTM B584 Alloy C87600

DIMENSIONS—WEIGHTS—QUANTITIES

SI	ZE		1	E	3	(;	PC-48	0-Y-LF	Master	
In.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	Lbs.	Kg.	Ctn Qty.	
1/2	15	3.647	93	1.570	40	2.251	57	0.48	0.22	100	
3/4	20	4.438	113	1.860	47	2.518	64	0.69	0.31	100	
1	25	4.640	118	2.360	60	2.870	73	1.07	0.48	50	
11/4	32	5.117	130	2.680	68	3.097	79	1.53	0.69	30	
11/2	40	6.314	160	3.060	78	3.544	90	2.12	0.96	30	
2	50	7.084	180	3.720	94	4.064	103	3.40	1.54	10	

SI	ZE		١		3		;	PC-480)-W-LF	Master
In.	mm.	In.	mm.	In.	mm.	ln.	mm.	Lbs.	Kg.	Ctn Qty.
1/2	15	3.647	93	1.570	40	2.251	57	0.48	0.22	100
3/4	20	4.438	113	1.860	47	2.518	64	0.69	0.31	100
1	25	4.640	118	2.360	60	2.870	73	1.06	0.48	50
11/4	32	5.117	130	2.680	68	3.097	79	1.52	0.69	30
11/2	40	6.314	160	3.060	78	3.544	90	2.11	0.96	30
2	50	7.084	180	3.720	94	4.064	103	3.38	1.53	10

Install 5 Pipe diameters minimum downstream from pump discharge or changes in direction to avoid flow turbulence. Flow straighteners may be required in extreme cases.

NIBCO In-line check valves may be installed in both horizontal and vertical lines, or in any intermediate position.

Do not use for reciprocating air compressor service.

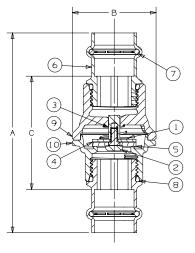


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PC-480-Y-LF PC-480-W-LF

Press Ends



PC-480-Y-LF PC-480-W-LF

Press x Press









Lead-Free Brass Ball Valves - Threaded

Features: Two-Piece Body • Full Port • Blowout-Proof Stem • PTFE Seats

Approvals: MSS SP-110/145 ● IAPMO/ANSI Z1157 ● NSF/ANSI 61/372

1/4"-2" 600 PSI non-shock cold working pressure, 350 PSI at 200°F max 2-1/2"-4" 400 PSI non-shock cold working pressure, 250 PSI at 200°F max









Not intended for steam usage

CSA (1/4" - 2"):

- ANSI Z21.15 / CSA 9.1
- ASME B16.44: 5 psig (maximum)
- ASME B16.33: 125 psig (maximum)
- CAN / CGA 3.16
- CGA CR91-002: 1/2 psig, 2psig, and 5 psig

FM (1/4" - 2"):

• 1140 approved 175 wwp

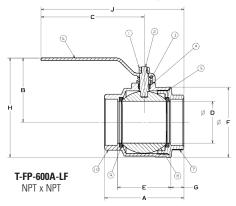
UL, Gas and Oil (1/4" - 4"):

- UL 1477 (YQNZ): Compressed gas shutoff valves 250 PSI
- UL 842 (YRBX): Flammable liquid shutoff valves 250 PSI
- UL 842 (YRPV): Gas shutoff valves 250 PSI
- UL 842 (MHKZ): Manual valves 250 PSI
- UL 125 (YSDT): LP-Gas shutoff valves 250 PSI
- UL Subject 258 (VQGU): Trim and drain valves (1/4" to 2")

Dezincification Resistant T-FP-600A-LF

T-FP-600A-LF-LL

w/Locking Lever



Handle Options:LeverLocking leverExtended lever

MATERIAL LIST

PART	SPECIFICATION
1. Body	Forged DZR Copper Alloy
2. End Cap	Forged DZR Copper Alloy
3. Ball Seat	PTFE
4. Ball	Chrome Plated LF Brass - C46500 (1/2"-1") Stainless Steel 316 (11/4"-4")
5. Stem	Brass
6. Stem Packing	PTFE
7. Packing Nut	Brass
8. Lever Handle	Steel, Plated
9. Handle Nut	Stainless Steel

DIMENSIONS—WEIGHTS—QUANTITIES

SI	ZE		4		3		;	[)		<u> </u>		<u> </u>	(<u> </u>		1	J		T-FP-60	0A-LF	Master
ln.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Ctn Qty.								
1/4	8	1.76	45	1.73	44	3.54	90	0.39	10	0.82	21	1.01	26	0.47	12	2.24	57	4.42	112	0.33	0.15	18
3/8	10	1.76	45	1.73	44	3.54	90	0.39	10	0.82	21	1.01	26	0.47	12	2.24	57	4.42	112	0.30	0.14	18
1/2	15	2.05	52	1.94	49	3.54	90	0.58	15	0.98	25	1.24	31	0.52	13	2.57	65	4.57	116	0.44	0.20	18
3/4	20	2.36	60	2.11	54	3.78	96	0.75	19	1.24	31	1.49	38	0.56	14	2.85	72	4.98	126	0.66	0.30	12
1	25	2.76	70	2.56	65	4.53	115	0.95	24	1.50	38	1.79	45	0.63	16	3.48	88	5.91	150	1.10	0.50	6
-1/4	32	3.31	84	2.98	76	4.53	115	1.26	32	1.88	48	2.34	59	0.71	18	4.13	105	6.18	157	1.57	0.71	4
-1/2	40	3.66	93	3.37	86	5.51	140	1.58	40	2.22	56	2.83	72	0.72	18	4.78	121	7.34	186	2.40	1.09	2
2	50	4.18	106	3.70	94	5.51	140	1.97	50	2.68	68	3.42	87	0.75	19	5.41	137	7.6	193	3.37	1.53	2
2-1/2	65	5.38	137	4.76	121	8.66	220	2.52	64	3.34	85	4.33	110	1.02	26	6.99	178	11.35	288	7.60	3.45	3
3	80	6.09	155	5.08	129	8.66	220	2.91	74	3.89	99	4.92	125	1.10	28	7.58	193	11.68	297	9.36	4.24	2
4	100	7.39	188	5.87	149	9.61	244	3.90	99	4.95	126	6.38	162	1.22	31	9.06	230	13.3	338	16.85	7.64	1

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WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Lead-Free Brass Ball Valves - Threaded

Features: Two-Piece Body • Full Port • Blowout-Proof Stem • PTFE seats **Approvals:** MSS SP-110/145 • IAPMO/ANSI Z1157 • NSF/ANSI 61/372





600 PSI non-shock cold working pressure (for cold water applications only)

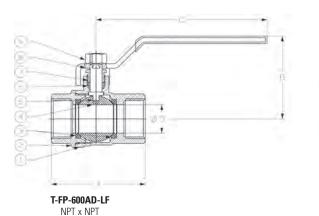
Not intended for steam or gas usage

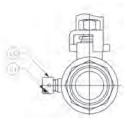
MATERIAL LIST

		MAILMAL LIGI
	PART	SPECIFICATION
1.	Body	Forged DZR Copper Alloy
2.	End Cap	Forged DZR Copper Alloy
3.	Ball Seat	PTFE
4.	Ball	Stainless Steel or Chrome Plated Brass
5.	Stem	Brass
6.	O-Ring (Stem Seal)	Fluorocarbon (FKM)
7.	Stem Packing	PTFE
8.	Packing Nut	Brass
9.	Lever Handle	Steel, Plated
10.	Drain Cap	Brass
11.	Seal	Buna-N



T-FP-600AD-LF w/Drain





DIMENSIONS—WEIGHTS—QUANTITIES

Size			Α		3	(<u> </u>	Po	rt D			Ctn.
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Qty.
1/2	15	2.18	55	1.67	42	3.54	90	0.58	15	0.48	0.22	18
3/4	20	2.48	63	2.14	54	4.47	114	0.75	19	0.75	0.34	12



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Lead-Free Brass Ball Valves - Solder

Features: Two-Piece Body • Full Port • Blowout-Proof Stem • PTFE Seats **Approvals:** MSS SP-110/145 • IAPMO/ANSI Z1157 • NSF/ANSI 61/372

UPC

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NSF/ANSI 61 & 372
IAPMO/ANSI 21157



2 year limited warranty

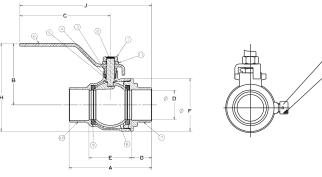
3/8"-2" 600 PSI non-shock cold working pressure, 350 PSI at 200°F max 2-1/2"-3" 400 PSI non-shock cold working pressure, 250 PSI at 200°F max

Not intended for steam or gas usage

MATERIAL LIST

	PART	SPECIFICATION
1.	Body	Forged DZR Copper Alloy
2.	End Cap	Forged DZR Copper Alloy
3.	Ball Seat	PTFE
4.	Ball	Stainless Steel or Chrome Plated Brass
5.	Stem	Brass
6.	O-Ring (Stem Seal)	Fluorocarbon (FKM)
7.		PTFE
8.	Packing Nut	Brass
9.	Lever Handle	Steel, Plated
10.	Lock Washer	Stainless Steel
11.	Handle Nut	Stainless Steel
12.	Drain Cap*	Brass
13.	Seat*	EPDM

Note: *parts 12 and 13 are applicable to valve with drain only.







S-FP-600AD-LF w/Drain

Handle Options:

- Lever
- Extended lever

DIMENSIONS—WEIGHTS—QUANTITIES

	DIMICIOSIONS—WEIGHTS—COANTITIES																					
SI	ZE		A	Е	3	(;)				F	(ì	I	Н	J		S-FP-60	0A-LF	Master
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Ctn Qty.
3/8	10	1.75	44	1.50	38	3.74	95	0.50	13	1.00	25	1.02	26	0.37	9	2.01	51	4.62	117	0.30	0.14	18
1/2	15	1.97	50	1.78	45	3.74	95	0.63	16	0.97	25	1.28	33	0.50	13	2.42	61	4.74	120	0.44	0.20	18
3/4	20	2.73	69	1.94	49	3.97	101	0.88	22	1.23	31	1.57	40	9.75	248	2.72	69	5.31	135	0.66	0.30	12
1	25	3.34	85	2.51	64	4.33	110	1.00	25	1.53	39	1.89	48	0.91	23	3.46	88	6.04	153	1.10	0.50	6
1-1/4	32	3.80	97	2.57	65	5.00	127	1.38	35	1.87	47	2.28	58	0.96	24	3.71	94	6.88	175	1.57	0.71	4
1-1/2	40	4.42	84	3.04	77	6.18	157	1.63	41	2.21	56	2.78	71	1.10	28	4.43	113	8.38	213	2.40	1.09	2
2	50	5.34	136	3.34	85	6.18	157	2.12	54	2.66	68	3.46	88	1.34	34	5.07	129	8.85	225	3.37	1.53	2
2-1/2	65	6.24	158	4.78	121	9.45	240	2.63	67	3.28	83	4.29	109	1.48	38	6.93	176	12.60	320	7.60	3.45	3
3	75	7.11	181	5.17	131	9.51	2.42	3.13	80	3.81	97	4.96	126	1.65	42	7.65	194	13.10	333	16.85	7.64	1
SI	ZE		A	Е	3		;)	E	=		F	(3		Н		J	S-FP-60	0AD-LF	Master
In.	mm.	In.	mm.	In.	mm.	ln.	mm.	In.	mm.	In.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	Lbs.	Kg.	Ctn Qty.

N 44 0.20 1/2 15 1.97 50 3.74 95 1.78 45 0.63 16 0.97 25 1.78 0.5 13 2.42 474 120 18 45 61 20 2.73 3.97 101 1.94 22 1.23 31 2.09 2.72 5.31 0.66 0.30 12 1.53 39 2.40 0.91 6 50 3.34 85 4.33 110 2.51 25 61 23 3.46 88 6.04 153 1.10 0.50

Notes:

 Valves with drain for cold water applications only

2. Applicable to valves with drain only

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www. P65Warnings.ca.gov.



Features: Press Ends Leak Detection • Two-Piece Body • PTFE Seats • Full Port • Blowout-Proof Stem

Approvals: MSS SP-110/145 ● IAPMO/ANSI Z1157 • NSF/ANSI 61/372 • Conforms to ASME B16.51[†]

Size range: 1/2" - 2"

Pressure rating: 250 PSI non-shock cold working pressure Maximum pressure / temperature: 225 PSI at 250° F

Lead-free markings: White handle and blue hang tag

Applications: Drinking Water • Domestic Hot & Cold Water • HVAC (condensors, chilled water, hot water heating) • Isolation and Throttling (half-open to full-open only) • Connect to Rigid Copper Tubing Manufactured per ASTM B88, Condition H (hard drawn)

Reference Press System catalog for updated Approved Tool and Jaw Compatibility Matrix list.

Not intended for steam or gas usage.

MATERIAL LIST

PART	SPECIFICATION
1. Body	Forged DZR Copper Alloy - C46500
2. Seat Seal	PTFE
3. O-ring	EPDM - ASTM D2000
4. Washer	PTFE
5. Lock Nut	Stainless Steel + Nylon
6. Handle	Steel, Plated
7. Stem	Brass
8. Ball	Chrome Plated Brass - C46500 (1/2"-1")
	Stainless Steel 316 (11/4"-2")
9. End Cap	Forged DZR Copper Alloy - C46500
10. O-ring	EPDM - ASTM D2000
11. Metal Ring	Stainless Steel (1-1/4"-2") [‡]

Options:

- Extended lever
- **EPDM Seal for Press Ends**
- Wing Handle



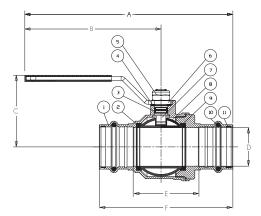
Handle Markings





PC-FP-600A-LF

Press x Press 1/2" - 2"



PC-FP-600A-LF Press x Press 1/2" - 2":

†Tested to the performance criteria of ASME B16.51

‡ Patent Pending

DIMENSIONS—WEIGHTS—QUANTITIES

SIZE	ZE A			3	0	;		<u> </u>		<u> </u>		F	Weight	
ln.	ln.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	ln.	mm.	Lbs.	Kg.
1/2	4.57	116	3.66	93	2.09	53	0.631	16.03	1.30	33.0	2.87	73.0	0.38	0.17
3/4	5.71	145	4.17	106	2.80	71	0.883	22.43	1.63	41.5	3.44	87.5	0.73	0.33
1	5.83	148	4.17	106	3.15	80	1.140	28.96	1.83	46.5	3.64	92.5	1.00	0.46
1-1/4:	6.97	177	4.61	117	2.52	64	1.386	35.20	2.19	55.5	4.43	112.5	1.70	0.77
1-1/2‡	9.06	230	6.30	160	3.23	82	1.636	41.56	2.52	64.0	5.30	134.5	2.37	1.08
2±	9.88	251	6.30	160	3.23	82	2.137	54.28	3.39	86.0	6.69	170.0	3.96	1.80

IAPMO/ANSI Z1157: in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press ends to be fully tested to IAPMO PS-117 performance requirements which includes the following additional tests:

- 1. Unrestrained Hydrostatic Pressure Test at 20 °C (68°F)
- 2. Unrestrained Hydrostatic Pressure Test at 93 °C (200°F)
- 3. Static Torsion Test for Press Connections
- 4. Bending Test 5. Vacuum Test

- 6. Hydraulic Shock (Water Hammer) Test
- 7. Vibration Test
- 8. Thermal Cycling Test
- 9. Alternate Thermal Cycling Test
- 10. Dynamic Torsion Test for Press Connections

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Press Ends Leak Detection • Two-Piece Body • PTFE Seats • Full Port • Blowout-Proof Stem Approvals: MSS SP-110/145 ● IAPMO/ANSI Z1157 ● NSF/ANSI 61/372 ● Conforms to ASME B16.51[†]

Size range: 2½" - 4"

Pressure rating: 200 PSI non-shock cold working pressure

Maximum pressure / temperature: 200 PSI at 200° F

Lead-free markings: White handle and blue hang tag

Applications: Drinking Water • Domestic Hot & Cold Water • HVAC (condensors, chilled water, hot water heating) • Isolation and Throttling (half-open to full-open only) • Connect to Rigid Copper Tubing Manufactured per ASTM B88. Condition H (hard drawn)

Reference Press System catalog for updated Approved Tool and Jaw Compatibility Matrix list.

Not intended for steam or gas usage.

MATERIAL LIST

	WATERIAL ER	/ I
	PART	SPECIFICATION
1	Handle	Steel Plated
2	Handle Cover	PVC
3	Handle Lock Nut	Steel
4	Stem	Brass/Bronze
5	Packing Nut	Brass/Bronze
6	Packing	PTFE
7	Leak Detection O-ring	EPDM - ASTM D2000
8	O-ring, Boss Seal	EPDM - ASTM D2000
9	Body End	Brass/Bronze
10	Ball	Stainless Steel
11	Body	Brass/Bronze
12	Ball Seat Seal	PTFE
13	Press End Adaptor w/Leak Detection	ASTM B75 Alloy C12200

Options:

- Extended lever
- **EPDM Seal for Press Ends**



Handle Markings

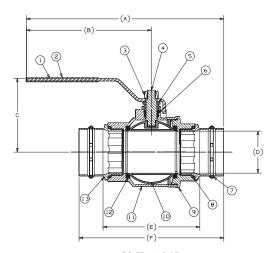








PC-FP-600A-LF Press x Press 2 1/2" - 4"



PC-FP-600A-LF Press x Press 2 1/2" - 4"

DIMENSIONS—WEIGHTS—QUANTITIES

SI	SIZE		Α		B		C		D		<u> </u>	F		Weight	
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
2½"	15	13.07	332	8.66	220	4.80	121.9	2.52	64.00	5.88	149.30	8.81	223.70	9.55	4.33
3"	20	13.67	347.2	8.66	220	5.12	130	2.91	73.90	6.71	170.40	10.03	261.60	13.07	5.93
4"	25	15.87	403.1	9.61	244.1	5.98	151.9	3.9	99.00	8.21	208.50	12.53	318.20	26.32	11.94

IAPMO/ANSI Z1157: in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press ends to be fully tested to IAPMO PS-117 performance requirements which includes the following additional tests:

†Tested to the performance criteria of ASME B16.51

- 1. Unrestrained Hydrostatic Pressure Test at 20 °C (68°F)
- 2. Unrestrained Hydrostatic Pressure Test at 93 °C (200°F)
- 3. Static Torsion Test for Press Connections
- 4. Bending Test

- 6. Hydraulic Shock (Water Hammer) Test
- 7. Vibration Test
- 8. Thermal Cycling Test
- 9. Alternate Thermal Cycling Test
- 10. Dynamic Torsion Test for Press Connections



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Press Ends Leak Detection • Wing Handle • Two-Piece Body • PTFE Seats • Full Port • Blowout-Proof Stem

Approvals: MSS SP-110/145 ● IAPMO/ANSI Z1157 • NSF/ANSI 61/372 • Conforms to ASME B16.51[†]

Size range: 1/2" - 1"

Pressure rating: 250 PSI non-shock cold working pressure Maximum pressure / temperature: 225 PSI at 250° F

Lead-free markings: White handle and blue hang tag

Applications: Drinking Water ● Domestic Hot & Cold Water ● HVAC (condensors, chilled water, hot water heating) ● Isolation and Throttling (half-open to full-open only) ● Connect to Rigid Copper Tubing Manufactured per ASTM B88, Condition H (hard drawn)

Reference Press System catalog for updated Approved Tool and Jaw Compatibility Matrix list.

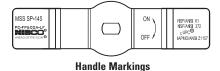
Not intended for steam or gas usage.

MATERIAL LIST

	PART	SPECIFICATION
1.	Body	Forged DZR Copper Alloy - C46500
2.	Seat Seal	PTFE
3.	0-ring	EPDM - ASTM D2000
4.	Washer	PTFE
5.	Lock Nut	Stainless Steel + Nylon
6.	Handle	Steel, Plated
7.	Stem	Brass
8.	Ball	Chrome Plated Brass - C46500
9.	End Cap	Forged DZR Copper Alloy - C46500
10.	0-ring	EPDM - ASTM D2000

Options:

- Extended lever
- EPDM Seal for Press Ends
- Lever Handle





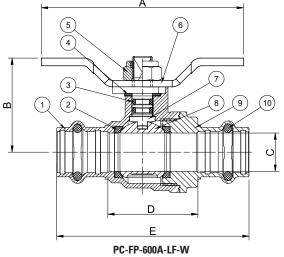






PC-FP-600A-LF-W

Press x Press 1/2" - 1"



Press x Press 1/2" - 1"

†Tested to the performance criteria of ASME B16.51

DIMENSIONS—WEIGHTS—QUANTITIES

S	Size		4	E	3		C)		E	Weight	
In.	mm.	In.	mm.	In.	mm.	ln.	mm.	In.	mm.	ln.	mm.	Lbs.	Kg.
1/2"	12.70	3.11	79.00	1.45	36.80	0.59	15.00	1.39	35.20	2.96	75.20	0.4230	0.1918
3/4"	19.05	4.25	108.00	2.15	54.70	0.79	20.00	1.70	43.20	3.51	89.20	0.8020	0.3637
1"	25.40	4.25	108.00	2.31	58.70	0.98	25.00	1.90	48.20	3.71	94.20	1.0930	0.4957

IAPMO/ANSI 21157: in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press ends to be fully tested to IAPMO PS-117 performance requirements which includes the following additional tests:

- 1. Unrestrained Hydrostatic Pressure Test at 20 °C (68°F)
- 2. Unrestrained Hydrostatic Pressure Test at 93 °C (200°F)
- 3. Static Torsion Test for Press Connections
- 4. Bending Test 5. Vacuum Test

- 6. Hydraulic Shock (Water Hammer) Test
- 7. Vibration Test
- 8. Thermal Cycling Test
- 9. Alternate Thermal Cycling Test
- 10. Dynamic Torsion Test for Press Connections

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WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Press Slip ● Press Ends Leak Detection ● Double Stem Seal ● Two-Piece Body ● PTFE Seats ● Full Port ● Blowout-Proof Stem

Approvals: MSS SP-110/145 • IAPMO/ANSI Z1157 • NSF/ANSI 61/372 • Conforms to ASME B16.51[†]

Size range: 1/2" - 1"

Pressure rating: 250 PSI non-shock cold working pressure Maximum pressure / temperature: 225 PSI at 250° F

Lead-free markings: White handle and blue hang tag

Applications: Drinking Water ● Domestic Hot & Cold Water ● HVAC (condensors, chilled water, hot water heating) ● Isolation and Throttling (half-open to full-open only) ● Connect to Rigid Copper Tubing Manufactured per ASTM B88, Condition H (hard drawn)

Reference Press System catalog for updated Approved Tool and Jaw Compatibility Matrix list.

Not intended for steam or gas usage.

MATERIAL LIST

	PART	SPECIFICATION
1.	Body	Forged DZR Copper Alloy - C46500
2.	Seat Seal (2)	PTFE
3.	O-ring	EPDM - ASTM D2000
4.	Packing	PTFE
5.	Washer	Stainless Steel ASTM 321
6.	Lock Nut	Stainless Steel 304
7.	Handle	Steel, Plated
8.	Nut	Brass
9.	Stem	Brass
10.	Ball	Chrome Plated Brass - C46500
11.	End Cap / Slip Side	Forged DZR Copper Alloy - C46500
12.	0-ring (2)	EPDM - ASTM D2000



Handle Markings

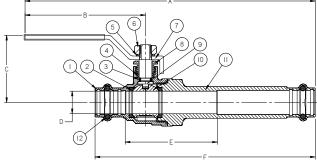
C (R)
NSF/ANSI 61 & 37Z
IAPMO/ANSI Z1157







Press x Press Slip 1/2" - 1"



PC-FP-600A-S-LF Press x Press Slip 1/2" - 1":

DIMENSIONS—WEIGHTS—QUANTITIES

	SIZE	SIZE A		E	<u> </u>	C	;		<u> </u>	E	<u> </u>		F	Weight	
	In.	In.	mm.	In.	mm.	ln.	mm.	ln.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
_	1/2"	8.23	209	3.78	96	1.83	46.5	0.63	16.03	2.41	61.2	5.76	146.2	0.7	0.32
	3/4"	9.12	231.7	3.98	101	2.11	53.5	0.88	22.43	2.88	73.2	6.74	171.2	1.19	0.54
	1"	10.13	257.2	4.37	111	2.58	65.5	1.14	28.96	3.43	87.2	7.49	190.2	1.82	0.83

IAPMO/ANSI 21157: in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press ends to be fully tested to IAPMO PS-117 performance requirements which includes the following additional tests:

†Tested to the performance criteria of ASME B16.51

- 1. Unrestrained Hydrostatic Pressure Test at 20 $^{\circ}\text{C}$ (68°F)
- 2. Unrestrained Hydrostatic Pressure Test at 93 °C (200°F)
- 3. Static Torsion Test for Press Connections
- 4. Bending Test

Options:

Extended lever

Wing Handle

EPDM Seal for Press Ends

- 6. Hydraulic Shock (Water Hammer) Test
- 7. Vibration Test
- 8. Thermal Cycling Test
- 9. Alternate Thermal Cycling Test
- 10. Dynamic Torsion Test for Press Connections



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Ball and Inline Check Valve Combined ● Press Ends Leak Detection ● Double Stem Seal ●

Two-Piece Body • PTFE Seats • Full Port • Blowout-Proof Stem

Approvals: MSS SP-110/145 • IAPMO/ANSI Z1157 • NSF/ANSI 61/372 • Conforms to ASME B16.51[†]

Size range: 1/2" - 11/2"

Pressure rating: 250 PSI non-shock cold working pressure

Maximum pressure / temperature: 150 PSI at 250° F

Lead-free markings: White handle and blue hang tag

Applications: Drinking Water • Domestic Hot & Cold Water • HVAC (condensors, chilled water, hot water heating) • Isolation and Throttling (half-open to full-open only) • Connect to Rigid Copper Tubing Manufactured per ASTM B88. Condition H (hard drawn)

Reference Press System catalog for updated Approved Tool and Jaw Compatibility Matrix list.

Not intended for steam or gas usage.

MATERIAL LIST

	PART	SPECIFICATION
1.	Body	Forged DZR Copper Alloy - C46500
2.	Seat Seal (2)	PTFE
3.	0-ring	EPDM - ASTM D2000
4.	Packing	PTFE
5.	Washer	Stainless Steel ASTM 321
6.	Lock Nut	Stainless Steel 304
7.	Handle	Steel, Plated
8.	Nut	Brass
9.	Stem	Brass
10.	Ball	Chrome Plated Brass - C46500 (1/2"-1")
		Stainless Steel 316 (11/4"-11/2")
11.	End Cap	Forged DZR Copper Alloy - C46500
12.	Check Valve	OV25-HT Cartridge
13.	0-ring (2)	EPDM - ASTM D2000 (Leak Detect)
14.	Metal Ring (2)	Stainless Steel (1¼"-1½")

Options:

- Extended lever
- EPDM Seal for Press Ends
- Wing Handle



Handle Markings

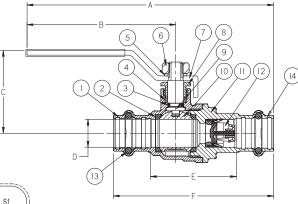
Dezincification Resistant



NSF/ANSI 61 & 372 IAPMO/ANSI Z1157

> Press x Press 1/2" - 1½"

PC-FP-485-LF



PC-FP-485-LF Press x Press 1/2" - 11/2"

DIMENSIONS—WEIGHTS—QUANTITIES

SIZE	SIZE A In. mm.		В		C)		E		F	Weight		
ln.			In.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	Lbs.	Kg.	
1/2"	5.87	149.00	3.78	96.00	1.83	46.50	0.631	16.03	1.82	46.20	3.39	86.20	0.50	0.23	
3/4"	6.58	167.20	3.98	101.00	2.11	53.50	0.883	22.43	2.39	60.70	4.20	106.70	0.88	0.40	
1"	7.36	187.00	4.37	111.00	2.58	65.50	1.140	28.96	2.90	73.70	4.71	119.70	1.42	0.65	
11/4"	8.82	224.00	5.04	128.00	2.70	68.50	1.386	35.20	3.62	91.90	5.86	148.90	2.16	0.98	
11/5"	10 69	271.50	6 22	158 00	3 16	80 20	1 636	41 56	4 22	107 20	7 00	177 70	3 12	1 42	

IAPMO/ANSI Z1157: in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press ends to be fully tested to IAPMO PS-117 performance requirements which includes the following additional tests:

†Tested to the performance criteria of ASME B16.51 ‡ Patent Pending

- 1. Unrestrained Hydrostatic Pressure Test at 20 $^{\circ}\text{C}$ (68°F)
- °F) 4. Bending Test 0°F) 5. Vacuum Test
- 7. Vibration Test 8. Thermal Cycling Test
- Alternate Thermal Cycling Test
 Dynamic Torsion Test for Press Connections

- 2. Unrestrained Hydrostatic Pressure Test at 93 °C (200°F) 3. Static Torsion Test for Press Connections
- 6. Hydraulic Shock (Water Hammer) Test

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Features: Press End Leak Detection • Two-Piece Body • PTFE Seats • Full Port • Blowout-Proof Stem

Approvals: MSS SP-110/145 ● IAPMO/ANSI Z1157 • NSF/ANSI 61/372 • Conforms to ASME B16.51[†]

Size range: 1/2" - 1"

NIBC

Pressure rating: 250 PSI non-shock cold working pressure Maximum pressure / temperature: 225 PSI at 250° F

Lead-free markings: White handle and blue hang tag

Applications: Drinking Water ● Domestic Hot & Cold Water ● HVAC (condensors, chilled water, hot water heating) ● Isolation and Throttling (half-open to full-open only) ● Connect to Rigid Copper Tubing Manufactured per ASTM B88, Condition H (hard drawn)

Reference Press System catalog for updated Approved Tool and Jaw Compatibility Matrix list.

Not intended for steam or gas usage.

MATERIAL LIST

	1117 (1 = 1117 (1 = 110)
PART	SPECIFICATION
1. Body	Forged DZR Copper Alloy - C46500
2. Seat Seal	PTFE
3. O-ring	EPDM - ASTM D2000
4. Washer	PTFE
5. Lock Nut	Stainless Steel + Nylon
6. Handle	Steel, Plated
7. Stem	Brass
8. Ball	Chrome Plated Brass - C46500 (1/2"-1")
9. End Cap	Forged DZR Copper Alloy - C46500
10. O-ring	EPDM - ASTM D2000

Options:

- Extended lever
- EPDM Seal for Press Ends
- Wing Handle





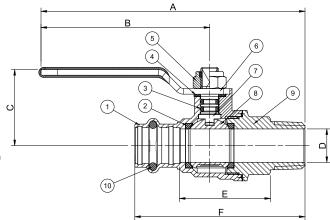






PCMT-FP-600A-LF

Press x MIP 1/2" - 1"



PCMT-FP-600A-LF

Press x Male 1/2" - 1"

DIMENSIONS—WEIGHTS—QUANTITIES

SIZE		Α		В		C			D		.	F		Weight	
ln.	mm.	In.	mm.	In.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
1/2"	12.70	5.30	134.70	3.62	92.00	1.34	34.00	0.59	15.00	1.60	40.70	3.00	76.20	0.4520	0.2050
3/4"	19.05	6.07	154.20	4.13	105.00	2.06	52.20	0.79	20.00	2.00	50.70	3.53	89.70	0.7940	0.3601
1"	25.40	6.29	159.70	4.13	105.00	2.21	56.20	0.98	25.00	2.23	56.70	3.89	98.70	1.1730	0.5320

IAPMO/ANSI Z1157: in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press ends to be fully tested to IAPMO PS-117 performance requirements which includes the following additional tests:

- 1. Unrestrained Hydrostatic Pressure Test at 20 °C (68°F)
- 2. Unrestrained Hydrostatic Pressure Test at 93 °C (200°F)
- 3. Static Torsion Test for Press Connections 4. Bending Test
- 5. Vacuum Test

- 6. Hydraulic Shock (Water Hammer) Test
- 7. Vibration Test
- 8. Thermal Cycling Test
- 9. Alternate Thermal Cycling Test
- 10. Dynamic Torsion Test for Press Connections

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

LEAD-FREE: Weighted average lead content ≤ 0.25%

†Tested to the performance criteria of ASME B16.51



Features: Press End Leak Detection • Two-Piece Body • PTFE Seats • Full Port • Blowout-Proof Stem

Approvals: MSS SP-110/145 ● IAPMO/ANSI Z1157 • NSF/ANSI 61/372 • Conforms to ASME B16.51[†]

Size range: 1/2" - 1"

Pressure rating: 250 PSI non-shock cold working pressure Maximum pressure / temperature: 225 PSI at 250° F

Lead-free markings: White handle and blue hang tag

Applications: Drinking Water ● Domestic Hot & Cold Water ● HVAC (condensors, chilled water, hot water heating) ● Isolation and Throttling (half-open to full-open only) ● Connect to Rigid Copper Tubing Manufactured per ASTM B88, Condition H (hard drawn)

Reference Press System catalog for updated Approved Tool and Jaw Compatibility Matrix list.

Not intended for steam or gas usage.

MATERIAL LIST

	INIAI EIIIAE EIOI
PART	SPECIFICATION
1. Body	Forged DZR Copper Alloy - C46500
2. Seat Seal	PTFE
3. O-ring	EPDM - ASTM D2000
4. Washer	PTFE
5. Lock Nut	Stainless Steel + Nylon
6. Handle	Steel, Plated
7. Stem	Brass
8. Ball	Chrome Plated Brass - C46500
9. End Cap	Forged DZR Copper Alloy - C46500
10. O-rina	EPDM - ASTM D2000

Options:

- Extended lever
- EPDM Seal for Press Ends
- Wing Handle



Handle Markings



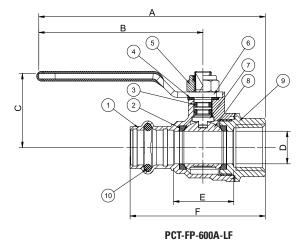






PCT-FP-600A-LF

Press x FIP 1/2" - 1"



Press x FIP 1/2" - 1"

†Tested to the performance criteria of ASME B16.51

DIMENSIONS—WEIGHTS—QUANTITIES

SIZE		Α			<u>B</u> <u>C</u> <u>D</u> <u>E</u> <u>F</u>		F	Weight							
ln.	mm.	In.	mm.	In.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
1/2"	12.70	4.75	120.70	3.62	92.00	1.34	34.00	0.59	15.00	1.09	27.70	2.45	62.20	0.3950	0.1791
3/4"	19.05	5.42	137.70	4.13	105.00	2.06	52.20	0.79	20.00	1.37	34.70	2.88	73.20	0.7280	0.3302
1"	25.40	5.64	143.20	4.13	105.00	2.21	56.20	0.98	25.00	1.62	41.20	3.24	82.20	1.0520	0.4771

IAPMO/ANSI Z1157: in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press ends to be fully tested to IAPMO PS-117 performance requirements which includes the following additional tests:

- 1. Unrestrained Hydrostatic Pressure Test at 20 $^{\circ}\text{C}$ (68°F)
- 2. Unrestrained Hydrostatic Pressure Test at 93 $^{\circ}\text{C}$ (200°F)
- 3. Static Torsion Test for Press Connections 4. Bending Test

5. Vacuum Test

- 6. Hydraulic Shock (Water Hammer) Test
- 7. Vibration Test
- 8. Thermal Cycling Test
- 9. Alternate Thermal Cycling Test
- 10. Dynamic Torsion Test for Press Connections

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WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Press End Leak Detection • Side Drain/Bleeder • Two-Piece Body • PTFE Seats • Full Port • Blowout-Proof Stem

Approvals: MSS SP-110/145 • IAPMO/ANSI Z1157 • NSF/ANSI 61/372 • Conforms to ASME B16.51[†]

Size range: 1/2" - 1"

Pressure rating: 250 PSI non-shock cold working pressure Maximum pressure / temperature: 225 PSI at 250° F

Lead-free markings: White handle and blue hang tag

Applications: Drinking Water • Domestic Hot & Cold Water • HVAC (condensors, chilled water, hot water heating) • Isolation and Throttling (half-open to full-open only) • Connect to Rigid Copper Tubing Manufactured per ASTM B88, Condition H (hard drawn)

Reference Press System catalog for updated Approved Tool and Jaw Compatibility Matrix list.

Not intended for steam or gas usage.

MATERIAL LIST

	MAI LIMAL LIGI	
PART	SPECIFICATION	
1. Body	Forged DZR Copper Alloy - C46500	_
2. Seat Seal	PTFE	
3. O-ring	EPDM - ASTM D2000	
4. Washer	PTFE	
5. Lock Nut	Stainless Steel + Nylon	
6. Handle	Steel, Plated	
7. Stem	Brass	
8. Ball	Chrome Plated Brass - C46500	
9. End Cap	Forged DZR Copper Alloy - C46500	
10. O-ring	EPDM - ASTM D2000	
11. Washer	EPDM	
12. Nut	Brass	

Options:

- Extended lever
- **EPDM Seal for Press Ends**
- Wing Handle



Handle Markings

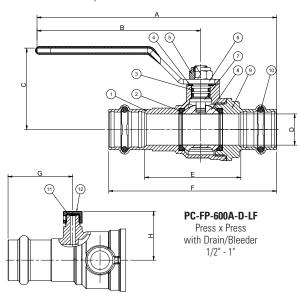






PC-FP-600A-D-LF

Press x Press with Drain/Bleeder 1/2" - 1"



DIMENSIONS—WEIGHTS—QUANTITIES

	SIZE		Α		В		C		D	<u>E</u>			F		G	H		Weight	
In.	mm.	ln.	mm.	In.	mm.	In.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	Lbs.	Kg.
1/2"	12.70	5.26	133.70	3.62	92.00	1.34	34.00	0.59	15.00	2.15	54.70	3.73	94.70	2.09	53.00	1.44	36.50	0.5220	0.2368
3/4"	19.05	6.05	153.70	4.13	105.00	2.06	52.20	0.79	20.00	2.43	61.70	4.24	107.70	2.32	59.00	1.44	36.50	0.8800	0.3991
1"	25.40	6.11	155.20	4.13	105.00	2.21	56.20	0.98	25.00	2.61	66.20	4.42	112.20	2.44	62.00	1.59	40.50	1.2610	0.5719

IAPMO/ANSI Z1157: in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press ends to be fully tested to IAPMO PS-117 performance requirements which includes the following additional tests:

- 1. Unrestrained Hydrostatic Pressure Test at 20 °C (68°F)
- 2. Unrestrained Hydrostatic Pressure Test at 93 °C (200°F)
- 3. Static Torsion Test for Press Connections
- 4. Bending Test

- 6. Hydraulic Shock (Water Hammer) Test
- 7. Vibration Test
- 8. Thermal Cycling Test
- 9. Alternate Thermal Cycling Test
- 10. Dynamic Torsion Test for Press Connections

For more information go to www.P65Warnings.ca.gov.

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm.

LEAD-FREE: Weighted average lead content ≤ 0.25%

†Tested to the performance criteria of ASME B16.51

Features: Press End Leak Detection • 3/4" Hose Connection w/Cap • Two-Piece Body • PTFE Seats • Full Port • Blowout-Proof Stem

Approvals: MSS SP-110/145 ● IAPMO/ANSI Z1157 • NSF/ANSI 61/372 • Conforms to ASME B16.51[†]

Size range: 1/2" - 3/4"

Pressure rating: 250 PSI non-shock cold working pressure Maximum pressure / temperature: 225 PSI at 250° F

Lead-free markings: White handle and blue hang tag

Applications: Drinking Water ● Domestic Hot & Cold Water ● HVAC (condensors, chilled water, hot water heating) ● Isolation and Throttling (half-open to full-open only) ● Connect to Rigid Copper Tubing Manufactured per ASTM B88, Condition H (hard drawn)

Reference Press System catalog for updated Approved Tool and Jaw Compatibility Matrix list.

Not intended for steam or gas usage.

MATERIAL LIST

	PART	SPECIFICATION
1.	Body	Forged DZR Copper Alloy - C46500
2.	Seat Seal	PTFE
3.	0-ring	EPDM - ASTM D2000
4.	Washer	PTFE
5.	Lock Nut	Stainless Steel + Nylon
6.	Handle	Steel, Plated
7.	Stem	Brass
8.	Ball	Chrome Plated Brass - C46500
9.	End Cap	Forged DZR Copper Alloy - C46500
10.	0-ring	EPDM - ASTM D2000
11.	Washer	EPDM
12.	Nut	Brass
13.	Cap Retainer	NBR

Options:

- Extended lever
- EPDM Seal for Press Ends
- Wing Handle



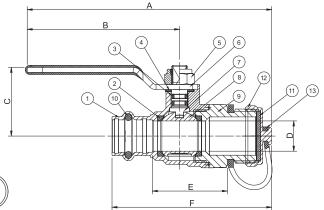
Handle Markings





PC-FP-600A-LF-HC

Press x Hose Cap 1/2" - 3/4"



PC-FP-600A-LF-HC Press x Hose Cap 1/2" - 3/4"

†Tested to the performance criteria of ASME B16.51

DIMENSIONS—WEIGHTS—QUANTITIES

S	SIZE		Α		3	C)		<u> </u>	F		Weight	
In.	mm.	ln.	mm.	In.	mm.	ln.	mm.	ln.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
1/2"	12.70	4.51	114.50	3.62	92.00	1.34	34.00	0.59	15.00	1.46	37.20	3.11	79.00	0.5220	0.2368
3/4"	19.05	5.10	129.50	4.13	105.00	2.06	52.20	0.79	20.00	1.74	44.20	3.52	89.50	0.8090	0.3669

IAPMO/ANSI Z1157: in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press ends to be fully tested to IAPMO PS-117 performance requirements which includes the following additional tests:

1. Unrestrained Hydrostatic Pressure Test at 20 °C (68°F) 6.

2. Unrestrained Hydrostatic Pressure Test at 93 °C (200°F)

3. Static Torsion Test for Press Connections

4. Bending Test

6. Hydraulic Shock (Water Hammer) Test

7. Vihration Test

8. Thermal Cycling Test
9. Alternate Thermal Cycling Test

10. Dynamic Torsion Test for Press Connections

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WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Press End Leak Detection ● PEX end F1960 Cold Expansion ● Two-Piece Body ● PTFE Seats ● Blowout-Proof Stem ● Double Stem Seal

Approvals: MSS SP-110/145 • IAPMO/ANSI Z1157 • NSF/ANSI 14 61/372 • Conforms to ASME B16.51[†]

Size range: 1/2" - 2"

Pressure rating: 250 PSI non-shock cold working pressure Maximum pressure / temperature: 225 PSI at 250° F

Lead-free markings: White handle and blue hang tag

Applications: Drinking Water • Domestic Hot & Cold Water • HVAC (condensors, chilled water, hot water heating) • Isolation and Throttling (half-open to full-open only) • Connect to Rigid Copper Tubing Manufactured per ASTM B88, Condition H (hard drawn)

Reference Press System catalog for updated Approved Tool and Jaw Compatibility Matrix list.

Not intended for steam or gas usage.

MATERIAL LIST

	PART	SPECIFICATION
1.	Body	Forged DZR Copper Alloy - C46500
2.	Seat Seal (2)	PTFE
3.	O-ring	EPDM - ASTM D2000
4.	Packing	PTFE
5.	Washer	Stainless Steel ASTM 321
6.	Lock Nut	Stainless Steel 304
7.	Handle	Steel, Plated
8.	Nut	Brass
9.	Stem	Brass
10.	Ball	Chrome Plated Brass - C46500 (½"-1")
		Stainless Steel 316 (11/4"-2")
11.	End Cap	Forged DZR Copper Alloy - C46500 (F1960 Cold Expansion)
12.	0-ring	EPDM - ASTM D2000 (Leak Detect)
13.	Metal Ring	Stainless Steel (11/4"-2") ^{††}

Options:

- Extended lever
- EPDM Seal for Press Ends
- Wing Handle

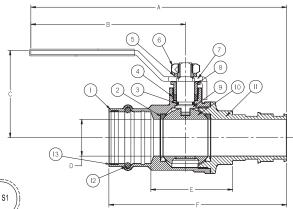


Handle Markings

PCPXA-FP-600A-LF

NSF/ANSI-14 61 & 372

Press x PEX (F1960 - Cold Expansion) 1/2" - 2"



Dezincification Resistant

PCPXA-FP-600A-LF

Press x PEX (F1960 - Cold Expansion) 1/2" - 2" ^{††}

DIMENSIONS—WEIGHTS—QUANTITIES

SIZE	SIZE A In. mm.		A B		(3	I	D	ı	E		F	Weight	
ln.			ln.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
1/2"	5.15	130.90	3.62	92.00	1.20	30.55	0.39	10.00	1.30	32.90	2.79	70.90	0.3400	0.1542
3/4"	5.48	139.20	3.62	92.00	1.34	34.00	0.60	15.30	1.48	37.70	3.33	84.70	0.5090	0.2308
1"	6.37	161.70	4.13	105.00	2.06	52.20	0.79	20.00	1.74	44.20	3.83	97.20	0.8620	0.3909
1 1/4"	7.09	180.00	4.37	111.00	2.58	65.5	0.98	25.00	2.19	55.50	4.75	120.70	1.5400	0.6900
1 ½"	8.31	211.00	5.04	128.00	2.70	68.5	1.09	27.80	2.63	66.85	5.72	145.40	2.3300	1.0600
2"	10.19	258.80	6.22	158.00	3.16	80.2	1.57	40.00	3.12	79.20	6.92	175.70	3.6600	1.6600

IAPMO/ANSI Z1157: in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press ends to be fully tested to IAPMO PS-117 performance requirements which includes the following additional tests:

†Tested to the performance criteria of ASME B16.51

- 1. Unrestrained Hydrostatic Pressure Test at 20 $^{\circ}\text{C}$ (68°F)
- 4. Bending Test
- 7. Vibration Test
- 9. Alternate Thermal Cycling Test
- 2. Unrestrained Hydrostatic Pressure Test at 93 °C (200°F) 5. Vacuum Test 8. Thermal Cycling Test 10. Dynamic Torsion Test for Press Connections 6. Hydraulic Shock (Water Hammer) Test

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Press End Leak Detection • PEX End F1807 Crimp • Two-Piece Body • PTFE Seats • Blowout-Proof Stem • Double Stem Seal

Approvals: MSS SP-110/145 • IAPMO/ANSI Z1157 • NSF/ANSI 14 61/372 • Conforms to ASME B16.51[†]

Size range: 1/2" - 2"

Pressure rating: 250 PSI non-shock cold working pressure

Maximum pressure / temperature: 225 PSI at 250° F

Lead-free markings: White handle and blue hang tag

Applications: Drinking Water • Domestic Hot & Cold Water • HVAC (condensors, chilled water, hot water heating) • Isolation and Throttling (half-open to full-open only) • Connect to Rigid Copper Tubing Manufactured per ASTM B88, Condition H (hard drawn)

Reference Press System catalog for updated Approved Tool and Jaw Compatibility Matrix list.

Not intended for steam or gas usage.

MATERIAL LIST

	PART	SPECIFICATION
1.	Body	Forged DZR Copper Alloy - C46500
2.	Seat Seal (2)	PTFE
3.	O-ring	EPDM - ASTM D2000
4.	Packing	PTFE
5.	Washer	Stainless Steel ASTM 321
6.	Lock Nut	Stainless Steel 304
7.	Handle	Steel, Plated
8.	Nut	Brass
9.	Stem	Brass
10.	Ball	Chrome Plated Brass - C46500 (1/2"-1")
		Stainless Steel 316 (11/4"-2")
11.	End Cap	Forged DZR Copper Alloy - C46500 (F1807 Crimp)
12.	0-ring	EPDM - ASTM D2000 (Leak Detect)
13.	Metal Ring	Stainless Steel (11/4"-2") ^{††}

Options:

- Extended lever
- **EPDM Seal for Press Ends**
- Wing Handle



Handle Markings

PCPX-FP-600A-LF Press x PEX (F1807 - Crimp) 1/2" - 2"

NSF/ANSI-14 61 & 372 IAPMO/ANSI Z1157

PCPX-FP-600A-LF

Press x PEX (F1807 - Crimp) 1/2" - 2" ††

Dezincification Resistant

DIMENSIONS—WEIGHTS—QUANTITIES

SIZE		Α		В	(;		D		:		F	We	ight
In.	In.	mm.	In.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
1/2"	5.11	129.90	3.62	92.00	1.20	30.55	0.39	10.00	1.30	32.90	2.75	69.90	0.3280	0.1487
3/4"	5.19	131.70	3.62	92.00	1.34	34.00	0.60	15.30	1.50	38.20	3.04	77.20	0.4810	0.2181
1"	5.97	151.70	4.13	105.00	2.06	52.20	0.80	20.30	1.72	43.70	3.43	87.20	0.7850	0.3560
1 1/4"	6.61	168.00	4.37	111.00	2.58	65.50	0.87	22.20	2.21	56.20	4.28	108.70	1.4400	0.6500
1 ½"	7.76	197.00	5.04	128.00	2.70	68.50	1.03	26.10	2.63	66.75	5.17	131.40	2.1900	0.9900
2"	9 51	241 50	6 22	158 00	3 16	80 20	1.37	34 70	3 09	78 60	6 25	158 70	3 3600	1 5200

IAPMO/ANSI Z1157: in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press ends to be fully tested to IAPMO PS-117 performance requirements which includes the following additional tests:

†Tested to the performance criteria of ASME B16.51 **Patent Pending

- 1. Unrestrained Hydrostatic Pressure Test at 20 °C (68°F)
- 2. Unrestrained Hydrostatic Pressure Test at 93 °C (200°F)
 - 5. Vacuum Test

4. Bending Test

- 7. Vibration Test 8. Thermal Cycling Test
- 9. Alternate Thermal Cycling Test

- 3. Static Torsion Test for Press Connections
- 6. Hydraulic Shock (Water Hammer) Test

10. Dynamic Torsion Test for Press Connections

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Press End Leak Detection ● Press x Press Union ● Two-Piece Body ● PTFE Seats ● Full Port ● Blowout-Proof Stem

Approvals: MSS SP-110/145 • IAPMO/ANSI Z1157 • NSF/ANSI 61/372 • Conforms to ASME B16.51[†]

Size range: 1/2" - 1"

Pressure rating: 250 PSI non-shock cold working pressure Maximum pressure / temperature: 225 PSI at 250° F

Lead-free markings: White handle and blue hang tag

Applications: Drinking Water • Domestic Hot & Cold Water • HVAC (condensors, chilled water, hot water heating) • Isolation and Throttling (half-open to full-open only) • Connect to Rigid Copper Tubing Manufactured per ASTM B88, Condition H (hard drawn)

Reference Press System catalog for updated Approved Tool and Jaw Compatibility Matrix list.

Not intended for steam or gas usage.

MATERIAL LIST

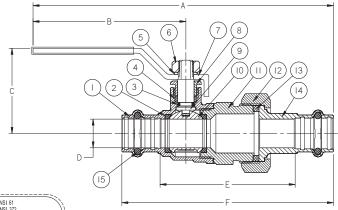
	PART	SPECIFICATION
1.	Body	Forged DZR Copper Alloy - C46500
2.	Seat Seal (2)	PTFE
3.	0-ring	EPDM - ASTM D2000
4.	Packing	PTFE
5.	Washer	Stainless Steel ASTM 321
6.	Lock Nut	Stainless Steel 304
7.	Handle	Steel, Plated
8.	Nut	Brass
9.	Stem	Brass
10.	Ball	Chrome Plated Brass - C46500
11.	End Cap	Forged DZR Copper Alloy - C46500
12.	Union Nut	Brass
13.	Washer	EPDM
14.	Press Fitting	Forged DZR Copper Alloy - C46500
15.	0-ring (2)	EPDM - ASTM D2000 (Leak Detect)





PCU-FP-600A-LF

Press x Press Union 1/2" - 1"



PCU-FP-600A-LF Press x Press Union 1/2" - 1 '

Options:

- Extended lever
- **EPDM Seal for Press Ends**
- Wing Handle



Handle Markings

DIMENSIONS—WEIGHTS—QUANTITIES

	SIZE		A		B		C		D		E			<u> </u>	Weight	
	ln.	mm.	In.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	In.	mm.	Lbs.	Kg.
_	1/2"	12.70	6.82	173.20	3.78	96.00	1.83	46.50	0.59	15.00	2.78	70.70	4.36	110.70	0.7700	0.3500
	3/4"	19.05	7.23	183.70	3.98	101.00	2.11	53.50	0.79	20.00	3.04	77.20	4.85	123.20	1.1900	0.5400
	1"	25.40	7.69	195.20	4.37	111.00	2.58	65.50	0.98	25.00	3.24	82.20	5.05	128.20	1.7700	0.8000

IAPMO/ANSI Z1157: in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press ends to be fully tested to IAPMO PS-117 performance requirements which includes the following additional tests:

†Tested to the performance criteria of ASME B16.51

- 1. Unrestrained Hydrostatic Pressure Test at 20 °C (68°F)
- 4. Bending Test
- 7. Vibration Test
- 9. Alternate Thermal Cycling Test 10. Dynamic Torsion Test for Press Connection

- 2. Unrestrained Hydrostatic Pressure Test at 93 °C (200°F) 3. Static Torsion Test for Press Connections
- 6. Hydraulic Shock (Water Hammer) Test
- 8. Thermal Cycling Test

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Press End Leak Detection ● FIP Union ● Two-Piece Body ● PTFE Seats ● Full Port ● Blowout-Proof Stem

Approvals: MSS SP-110/145 • IAPMO/ANSI Z1157 • NSF/ANSI 61/372 • Conforms to ASME B16.51[†]

Size range: 1/2" - 1"

Pressure rating: 250 PSI non-shock cold working pressure Maximum pressure / temperature: 225 PSI at 250° F

Lead-free markings: White handle and blue hang tag

Applications: Drinking Water ● Domestic Hot & Cold Water ● HVAC (condensors, chilled water, hot water heating) ● Isolation and Throttling (half-open to full-open only) ● Connect to Rigid Copper Tubing Manufactured per ASTM B88, Condition H (hard drawn)

Reference Press System catalog for updated Approved Tool and Jaw Compatibility Matrix list.

Not intended for steam or gas usage.

MATERIAL LIST

	PART	SPECIFICATION
1.	Body	Forged DZR Copper Alloy - C46500
2.	Seat Seal	PTFE
3.	0-ring	EPDM - ASTM D2000
4.	Washer	PTFE
5.	Lock Nut	Stainless Steel + Nylon
6.	Handle	Steel, Plated
7.	Stem	Brass
8.	Ball	Chrome Plated Brass - C46500
9.	End Cap	Forged DZR Copper Alloy - C46500
10.	0-ring	EPDM - ASTM D2000
11.	Fitting	Forged DZR Copper Alloy - C46500
12.	Washer	EPDM
13.	Nut	Brass

Options:

- Extended lever
- EPDM Seal for Press Ends
- Wing Handle



Handle Markings



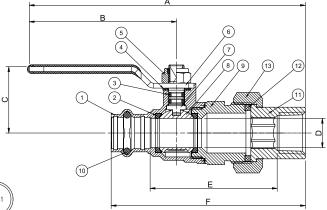






PCFU-FP-600A-LF

Press x FIP Union 1/2" - 1"



PCFU-FP-600A-LF Press x FIP Union 1/2" - 1"

†Tested to the performance criteria of ASME B16 51

DIMENSIONS—WEIGHTS—QUANTITIES

SIZE		Α		В		C		D			E		F	Weight	
In.	mm.	In.	mm.	In.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
1/2"	12.70	6.23	158.20	3.62	92.00	1.34	34.00	0.59	15.00	2.57	65.20	3.93	99.70	0.7720	0.3501
3/4"	19.05	6.92	175.70	4.13	105.00	2.06	52.20	0.79	20.00	2.84	72.20	4.38	111.20	1.2040	0.5461
1"	25.40	7.17	182.20	4.13	105.00	2.21	56.20	0.98	25.00	3.11	79.00	4.77	121.20	1.7750	0.8051

IAPMO/ANSI Z1157: in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press ends to be fully tested to IAPMO PS-117 performance requirements which includes the following additional tests:

- 1. Unrestrained Hydrostatic Pressure Test at 20 °C (68°F)
- 2. Unrestrained Hydrostatic Pressure Test at 93 $^{\circ}\text{C}$ (200°F)
- 3. Static Torsion Test for Press Connections 4. Bending Test
- 4. Bending Test

 5. Vacuum Test

- 6. Hydraulic Shock (Water Hammer) Test
- 7. Vibration Test
- 8. Thermal Cycling Test
- 9. Alternate Thermal Cycling Test
- 10. Dynamic Torsion Test for Press Connections

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WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Press Ends Leak Detection • Press x MIP Union • Two-Piece Body • PTFE Seats • Full Port • Blowout-Proof Stem

Approvals: MSS SP-110/145 • IAPMO/ANSI Z1157 • NSF/ANSI 61/372 • Conforms to ASME B16.51[†]

Size range: 1/2" - 1"

Pressure rating: 250 PSI non-shock cold working pressure Maximum pressure / temperature: 225 PSI at 250° F

Lead-free markings: White handle and blue hang tag

Applications: Drinking Water • Domestic Hot & Cold Water • HVAC (condensors, chilled water, hot water heating) • Isolation and Throttling (half-open to full-open only) • Connect to Rigid Copper Tubing Manufactured per ASTM B88, Condition H (hard drawn)

Reference Press System catalog for updated Approved Tool and Jaw Compatibility Matrix list.

Not intended for steam or gas usage.

MATERIAL LIST

	PART	SPECIFICATION
1.	Body	Forged DZR Copper Alloy - C46500
2.	Seat Seal (2)	PTFE
3.	0-ring	EPDM - ASTM D2000
4.	Packing	PTFE
5.	Washer	Stainless Steel ASTM 321
6.	Lock Nut	Stainless Steel 304
7.	Handle	Steel, Plated
8.	Nut	Brass
9.	Stem	Brass
10.	Ball	Chrome Plated Brass - C46500
11.	End Cap	Forged DZR Copper Alloy - C46500
12.	Union Nut	Brass
13.	Washer	EPDM
14.	MIP Fitting	Forged DZR Copper Alloy - C46500
15.	0-ring	EPDM - ASTM D2000 (Leak Detect)



Handle Markings



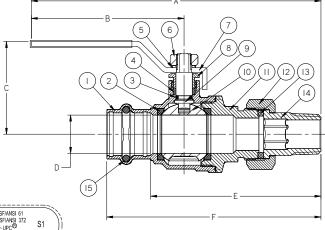






PCMU-FP-600A-LF

Press x MIP Union 1/2" - 1"



PCMU-FP-600A-LF Press x MIP Union 1/2" - 1

DIMENSIONS—WEIGHTS—QUANTITIES

SIZI	SIZE		Α		В		C		D		E		F	Weight	
In.	mm.	ln.	mm.	In.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
1/2"	12.70	6.31	160.20	3.62	92.00	1.34	34.00	0.59	15.00	2.60	66.00	4.00	101.70	0.6720	0.3048
3/4"	19.05	6.92	175.70	4.13	105.00	2.06	52.20	0.79	20.00	2.81	71.50	4.38	111.20	1.0580	0.4799
1"	25.40	7.13	181.20	4.13	105.00	2.21	56.20	0.98	25.00	3.05	77.50	4.73	120.20	1.5790	0.7162
34" x 1/2" MIP		6.80	172.70	3.98	101.00	2.11	53.50	0.59	15.00	3.51	89.20	4.42	112.20	0.9800	0.4500

IAPMO/ANSI Z1157: in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press ends to be fully tested to IAPMO PS-117 performance requirements which includes the following additional tests:

†Tested to the performance criteria of ASMF R16.51.

- 1. Unrestrained Hydrostatic Pressure Test at 20 °C (68°F)
- 2. Unrestrained Hydrostatic Pressure Test at 93 °C (200°F)
- 3. Static Torsion Test for Press Connections
- 4. Bending Test
- 5. Vacuum Test 6. Hydraulic Shock (Water Hammer) Test
- 7. Vibration Test
- 8. Thermal Cycling Test
- 9. Alternate Thermal Cycling Test
- 10. Dynamic Torsion Test for Press Connections

Options:

Extended lever

Wing Handle

EPDM Seal for Press Ends

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Features: Press End Leak Detection • Solder Union • Two-Piece Body • PTFE Seats • Full Port • Blowout-Proof Stem

Approvals: MSS SP-110/145 ● IAPMO/ANSI Z1157 • NSF/ANSI 61/372 • Conforms to ASME B16.51[†]

Size range: 1/2" - 1"

Pressure rating: 250 PSI non-shock cold working pressure Maximum pressure / temperature: 225 PSI at 250° F

Lead-free markings: White handle and blue hang tag

Applications: Drinking Water ● Domestic Hot & Cold Water ● HVAC (condensors, chilled water, hot water heating) ● Isolation and Throttling (half-open to full-open only) ● Connect to Rigid Copper Tubing Manufactured per ASTM B88, Condition H (hard drawn)

Reference Press System catalog for updated Approved Tool and Jaw Compatibility Matrix list.

Not intended for steam or gas usage.

MATERIAL LIST

	PART	SPECIFICATION
1.	Body	Forged DZR Copper Alloy - C46500
2.	Seat Seal	PTFE
3.	O-ring	EPDM - ASTM D2000
4.	Washer	PTFE
5.	Lock Nut	Stainless Steel + Nylon
6.	Handle	Steel, Plated
7.	Stem	Brass
8.	Ball	Chrome Plated Brass - C46500
9.	End Cap	Forged DZR Copper Alloy - C46500
10.	O-ring	EPDM - ASTM D2000
11.	Fitting	Forged DZR Copper Alloy - C46500
12.	Washer	EPDM
13.	Nut	Brass

Options:

- Extended lever
- EPDM Seal for Press Ends
- Wing Handle



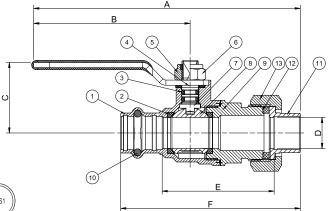
Handle Markings





PCSU-FP-600A-LF

Press x Solder Union 1/2" - 1"



PCSU-FP-600A-LF

Press x Solder Union 1/2" - 1"

†Tested to the performance criteria of ASME B16.51

DIMENSIONS—WEIGHTS—QUANTITIES

SIZE		Α		В		C		D		E		F		Weight	
In.	mm.	In.	mm.	In.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
1/2"	12.70	5.72	145.20	3.62	92.00	1.34	34.00	0.59	15.00	2.13	54.10	3.41	86.70	0.6130	0.2780
3/4"	19.05	6.64	168.70	4.13	105.00	2.06	52.20	0.79	20.00	2.44	62.10	4.10	104.20	1.0010	0.4540
1"	25.40	6.90	175.20	4.13	105.00	2.21	56.20	0.98	25.00	2.68	68.10	4.50	114.20	1.4880	0.6749

IAPMO/ANSI Z1157: in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press ends to be fully tested to IAPMO PS-117 performance requirements which includes the following additional tests:

- 1. Unrestrained Hydrostatic Pressure Test at 20 °C (68°F)
- 2. Unrestrained Hydrostatic Pressure Test at 93 °C (200°F)
- 3. Static Torsion Test for Press Connections
- 4. Bending Test

-) 6. Hydraulic Shock (Water Hammer) Test
 - 7. Vibration Test
 - 8. Thermal Cycling Test
 - 9. Alternate Thermal Cycling Test
- 10. Dynamic Torsion Test for Press Connections

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Lead-Free Bronze Ball Valves

Features: Silicon Performance Bronze® Alloy • Two-Piece Body • Full Port •

Blowout-Proof Stem

Approvals: MSS SP-110/145 ● NSF/ANSI/CAN 61/372-8 Commercial Hot 180°F

Size range: 1/4" - 2"

Pressure rating: 600 PSI non-shock cold working pressure Maximum pressure / temperature: 100 PSI at 300° F

Lead-free markings: Double oval in body casting, white handle and blue hang tag



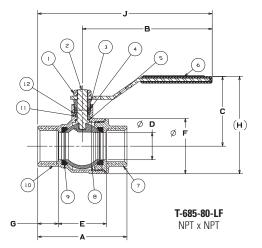


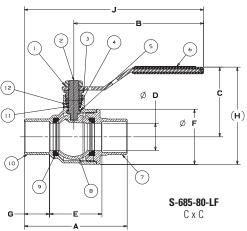
MATERIAL LIST

		MATERIAL EIGT
PART		SPECIFICATION
1. Handle		Steel, Plated
2. Nut, Ha	andle	Steel, Plated
3. Pack G	land	Brass ASTM B 16 Alloy C36000
4. Packing	g, Stem	Virgin PTFE
5. Washe		430 Stainless
6. O-Ring	(Stem Seal)	EPDM
7. Washe	r, Thrust	Reinforced PTFE
8. Stem		Silicon Bronze ASTM B371 Alloy C69300
9. Body		Silicon Bronze ASTM B283 Alloy C69300
10. Seat R	ing	Virgin PTFE
11. Ball		Silicon Bronze ASTM B283 Alloy C69300
12. End Pie	есе	Silicon Bronze ASTM B283 Alloy C69300



S-685-80-LF Solder





DIMENSIONS—WEIGHTS—QUANTITIES

			DIMENSION									WEIGHTO COANTITIES										
SI	ZE		A		3	(;		D						3		J	T-685	-80-LF	S-685	-80-LF	Master
ln.	mm.	In.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	In.	mm.	ln.	mm.	ln.	mm.	Lbs.	Kg.	Lbs.	Kg.	Ctn Qty.
1/4	8	1.98	50	3.95	100	1.95	50	0.31	8	1.09	28	1.24	31	0.42	11	4.93	125	0.52	0.24	_	_	24
3/8	10	1.98	50	3.95	100	2.01	51	0.50	13	1.09	28	1.24	31	0.40	10	4.93	125	0.49	0.22	0.46	0.21	24
1/2	15	2.22	56	3.95	100	2.01	51	0.50	13	1.00	25	1.24	31	0.61	15	5.06	129	0.47	0.21	0.46	0.21	80
3/4	20	2.66	68	4.76	121	2.30	58	0.75	19	1.42	36	1.64	42	0.63	16	6.09	155	0.70	0.32	0.69	0.31	60
1	25	3.27	83	4.76	121	2.56	65	1.00	25	1.77	45	2.03	52	0.75	19	6.4	163	1.10	0.50	1.12	0.51	40
1-1/4	32	3.56	90	6.75	171	3.07	78	1.25	32	2.01	51	2.38	60	0.76	19	8.51	216	1.69	0.77	1.66	0.75	4
1-1/2	40	3.98	101	6.75	171	3.31	84	1.50	38	2.44	62	2.89	73	0.77	20	8.73	222	2.58	1.17	2.71	1.23	2
2	50	4.52	115	6.75	171	3.56	90	2.00	51	2.94	75	3.6	91	0.79	20	9.01	229	4.37	1.98	4.62	2.1	8



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.





Lead-Free Bronze Ball Valves

Features: Silicon Performance Bronze® Alloy ● Two-Piece Body ●

Full Port • Blowout-Proof Stem • Stainless Trim

Approvals: MSS SP-110/145 ● NSF/ANSI/CAN 61/372-8 Commercial Hot 180°F

Size range: 1/4" - 2"

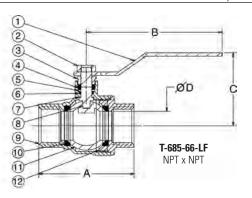
Pressure rating: 600 PSI non-shock cold working pressure Maximum pressure / temperature: 100 PSI at 300° F

Lead-free markings:

Double oval in body casting, white handle and blue hang tag

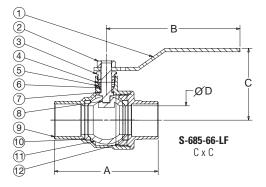
MATERIAL LIST

	PART	SPECIFICATION
1.	Handle	Steel, Plated
2.	Nut, Handle	Steel, Plated
3.	Pack Gland	Brass ASTM B16 Alloy C36000
4.	Packing, Stem	Virgin PTFE
5.	Washer, Flat	Stainless Steel ASTM A240 Alloy S43000
6.	O-Ring (Stem Seal)	EPDM
7.	Washer, Thrust	Reinforced PTFE
8.	Stem	Stainless Steel ASTM A276 Type 316
9.	Body	Silicon Bronze ASTM B283 Alloy C69300
10.	Seat Ring	Virgin PTFE
11.	Ball	Stainless Steel ASTM A276 Type 316 or ASTM A351 Type CF8M
12.	End Piece	Silicon Bronze ASTM B283 Alloy C69300





Dezincification Resistant



DIMENSIONS—WEIGHTS—QUANTITIES

												I	Dime	nsion	s															
		T-685	-66-LF	S-685	-66-LF							T-685	-66-LF	S-685	-66-LF			T-685	-66-LF	S-685	-66-LF	T-685	-66-LF	S-685	-66-LF					
SI	ZE		Α		١		B		;)		E		E		F		3		G		J		<u> </u>	T-685	-66-LF	S-685	-66-LF	Master
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Lbs.	Kg.	Ctn. Qty.
1/4	8	1.98	50	2.02	51	3.95	100	1.95	50	0.31	8	1.09	28	1.4	36	1.24	31	0.42	11	0.31	8	4.93	125	4.88	124	0.52	0.24	0.50	0.23	24
3/8	10	1.98	50	2.12	54	3.95	100	2.01	51	0.5	13	1.09	28	1.36	35	1.24	31	0.4	10	0.38	10	4.93	125	4.88	124	0.49	0.22	0.46	0.21	24
1/2	15	2.22	56	2.34	59	3.95	100	2.01	51	0.5	13	1	25	1.34	34	1.24	31	0.61	15	0.5	13	5.06	129	4.98	126	0.47	0.21	0.46	0.21	80
3/4	20	2.66	68	3.13	80	4.76	121	2.3	58	0.75	19	1.42	36	1.63	41	1.64	42	0.63	16	0.75	19	6.09	155	6.23	158	0.70	0.32	0.69	0.31	60
1	25	3.27	83	3.77	96	4.76	121	2.56	65	1	25	1.77	45	1.92	49	2.03	52	0.75	19	0.92	23	6.4	163	6.58	167	1.10	0.50	1.12	0.51	40
1-1/4	32	3.56	90	4.21	107	6.75	171	3.07	78	1.25	32	2.01	51	2.25	57	2.38	60	0.76	19	0.97	25	8.51	216	8.72	221	1.39	0.77	1.66	0.75	4
1-1/2	40	3.98	101	4.84	123	6.75	171	3.31	84	1.5	38	2.44	62	2.63	67	2.89	73	0.77	20	1.1	28	8.73	222	9.05	230	2.58	1.17	2.81	1.23	2
2	50	4.52	115	5.83	148	6.75	171	3.56	90	2	51	2.94	75	3.12	79	3.6	91	0.79	20	1.36	35	9.01	229	9.57	243	4.37	1.98	4.62	2.10	8



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Lead-Free Bronze Ball Valves

Features: Silicon Performance Bronze® Alloy ● Two-Piece Body ● Full Port ●

Blowout-Proof Stem

Approvals: MSS SP-110/145 • NSF/ANSI/CAN 61/372-8 Commercial Hot 180°F

Size range: 1/2" - 1"

Pressure rating: 600 PSI non-shock cold working pressure Maximum pressure / temperature: 100 PSI at 180° F

Lead-free markings:

Double oval in body casting, white handle and blue hang tag

MATERIAL LIST

	PART	SPECIFICATION
1.	Handle	Steel, Plated
2.	Nut, Handle	Steel, Plated
3.	Pack Gland	Brass ASTM B16 Alloy C36000
4.	Packing, Stem	Virgin PTFE
5.	Washer, Flat	430 Stainless
6.	O-Ring, Stem	EPDM
7.	Washer, Thrust	Reinforced PTFE
8.	Stem	Silicon Bronze ASTM B371 Alloy C69300
9.	Body, Solder	Silicon Bronze ASTM B283 Alloy C69300
10.	Seat Ring	Virgin PTFE
11.	Ball	Silicon Bronze ASTM B283 Alloy C69300
12.	End Piece, Solder	Silicon Bronze ASTM B283 Alloy C69300
13.	Drain Washer	Rubber
14.	Drain Cap	Brass ASTM B16 Alloy C36000

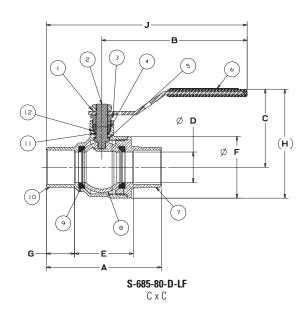
DIMENSIONS—WEIGHTS

Nom.	Approx.	DIMENSIONS/INCHES										
Size	Net Wt./Lbs.	Α	В	C	D							
1/2	0.504	2.28	3.90	1.95	0.50							
3/4	0.943	3.05	4.66	2.30	0.75							
1	1.114	3.72	4.66	2.50	1.00							





S-685-80-D-LF Solder



DIMENSIONS—WEIGHTS

NON	1 SIZE		A	E	3	(;)					(ì		J	We	ight
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Lbs.	Kg.	Lbs.	Kg.
1/2	15	2.47	63	3.96	101	1.99	51	0.50	13	1.47	37	1.48	38	0.5	13	5.11	130	0.50	0.23
3/4	20	3.24	82	4.76	121	2.39	61	0.75	19	1.74	44	1.87	47	0.75	19	6.35	161	0.94	0.43
1	20	3.87	98	2.56	65	4.76	121	1.00	25	2.02	51	2.27	58	0.92	23	6.68	170	1.11	0.51



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



Dezincification Resistant

NSF/ANSI 61 & 372

Lead-Free Bronze Stop & Drain Valves

Features: Silicon Performance Bronze® Alloy

Approvals: NSF/ANSI/CAN 61/372-8 Commercial Hot 180°F (includes annex F)

Pressure rating: 125 PSI non-shock cold working pressure

Maximum pressure / temperature: 125 PSI at 180° F

Lead-free markings:

PART

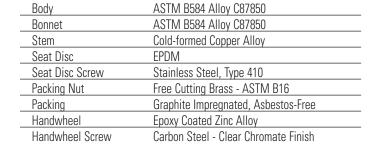
Double oval in body casting and white handle



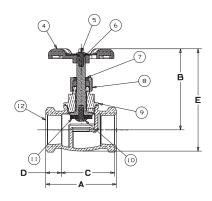




76-LF FIP x FIP

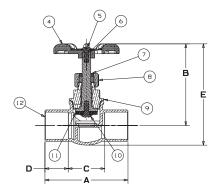


MATERIALS LIST SPECIFICATION



76-LF

DESCRIPTION	NOM.	DIMEN	APPROX.	
	SIZE	Α	В	NET WT.
Stop & Waste	1/2"	2 ³ /16"	2 ⁹ /16"	.54 lb
Valve FIP x FIP	3/4"	2 ⁵ /16"	2 ⁹ /16"	.60 lb



726-LF

DESCRIPTION	*NOM.	DIMEN	APPROX.		
DESCRIPTION	SIZE	В	C	NET WT.	
Stop & Waste Valve	1/2"	2 ⁹ /16"	1 ³ /16"	.42 lb	
Cup x Cup	3/4"	2 ⁹ /16"	1 ³ /16"	.49 lb	

DIMENSIONS—WEIGHTS—QUANTITIES

NOM	SIZE		4		3		;		<u> </u>	E				76-	-LF	726	-LF	Master
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Lbs.	Kg.	Ctn Qty.
1/2	15	2.16	55	2.19	56	1.44	37	0.36	9	3.06	78	2.12	54	0.54	0.XX	0.42	0.XX	50
3/4	20	2.28	58	2.31	59	1.28	33	0.50	13	3.21	82	2.12	54	0.60	0.XX	0.49	0.XX	50



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



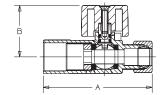
Pressure Rating: 125 PSI Non-Shock Cold Working Pressure





NIBCO PRO-Stop Supply Stops are specifically designed for use in applications that deliver water for human consumption; this includes commercial as well as residential construction.

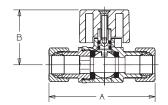




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71	ZU	١-L	.г	<u> </u>

DECEMBRICAL	Inlet x Outlet	DIMEN	ISIONS	APPROX.	
DESCRIPTION	iniet x outlet	Α	В	NET WT.	
STRAIGHT PATTERN	1/2 x 1/2 OD	2.73"	1.15"	.212 lb	
Solder x Compression	1/2 x 3/8 OD	2.44"	1.15"	.172 lb	



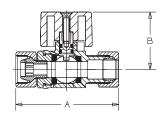


71	ΛN	ı	Е	\wedge
71	4U	I- I		<u> </u>

ll O4l4	DIMEN	ISIONS	APPROX.
iniet x outlet	Α	В	NET WT.
5/8 OD x 1/2 OD	2.62"	1.15"	.252 lb
5/8 OD x 3/8 OD	2.34"	1.15"	.213 lb
5/8 OD x 1/4 OD	2.28"	1.15"	.205 lb
½ OD x 1/2 OD	2.73"	1.15"	.245 lb
1/2 OD x 3/8 OD	2.50"	1.15"	.207 lb
3/8 OD x 3/8 OD	2.22"	1.15"	.170 lb
	5/8 0D x 3/8 0D 5/8 0D x 1/4 0D ½ 0D x 1/2 0D 1/2 0D x 3/8 0D	Inlet x Outlet A 5/8 0D x 1/2 0D 2.62" 5/8 0D x 3/8 0D 2.34" 5/8 0D x 1/4 0D 2.28" ½ 0D x 1/2 0D 2.73" 1/2 0D x 3/8 0D 2.50"	A B 5/8 0D x 1/2 0D 2.62" 1.15" 5/8 0D x 3/8 0D 2.34" 1.15" 5/8 0D x 1/4 0D 2.28" 1.15" ½ 0D x 1/2 0D 2.73" 1.15" 1/2 0D x 3/8 0D 2.50" 1.15"

MATERIAL LIST				
PART SPECIFICATION				
BODY / BODY END	DZR COPPER ALLOY CHROME PLATED			
RETAINER	DZR COPPER ALLOY			
STEM	DZR COPPER ALLOY			
BALL	DZR COPPER ALLOY CHROME PLATED			
COMPRESSION NUT	BRASS – CHROME PLATED			
FERRULE	BRASS			
0-RING	EPDM			
HANDLE	ABS – CHROME PLATED			
SCREW	STAINLESS STEEL			

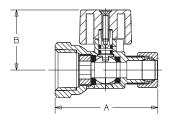




7140F-LF 🗘

DESCRIPTION	Inlet x Outlet	DIMENSIONS		APPROX.	
DESCRIPTION	illiet x vallet	Α	В	NET WT.	
STRAIGHT PATTERN Female Comp x Compression	3/8 ODF x 3/8 OD	2.09"	1.15"	.170 lb	





7150-LF 🗘

DECORIDATION	l-1-4 O41-4	DIMENSIONS		APPROX.	
DESCRIPTION	Inlet x Outlet	Α	В	NET WT.	
STRAIGHT PATTERN FIP x Compression	1/2 x 1/2 OD	2.28"	1.21"	.228 lb	
	1/2 x 3/8 OD	2.09"	1.21"	.197 lb	
	3/8 x 3/8 OD	2.01"	1.15"	.160 lb	

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WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



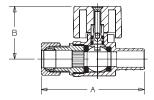
Pressure Rating: 125 PSI Non-Shock Cold Working Pressure





NIBCO PRO-Stop Supply Stops are specifically designed for use in applications that deliver water for human consumption; this includes commercial as well as residential construction.

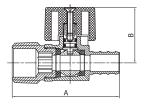




7160-LF 🗘

DECORIDEION	Index On Alex	DIMENSIONS		APPROX.
DESCRIPTION	Inlet x Outlet	Α	В	NET WT.
STRAIGHT PATTERN	1/2 x 3/8 OD	2.24"	1.15"	.152 lb
PEX x Compression	1/2 x 1/4 OD	2.27"	1.15"	.153 lb

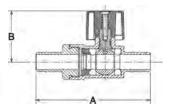




7160M-LF 🗘

DECORIDETON	l-1-4 O41-4	DIMENSIONS		APPROX.	
DESCRIPTION	Inlet x Outlet	Α	В	NET WT.	
STRAIGHT PATTERN PEX x MIP	1/2 x 1/2	2.22"	1.15"	.159 lb	





7160PEX-LF 🗘

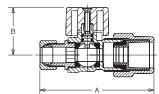
DECORIDATION	l-1-4 O41-4	DIMENSIONS		APPROX.	
DESCRIPTION	Inlet x Outlet	Α	В	NET WT.	
STRAIGHT PATTERN PEX x PEX	1/2 x 1/2	2.26"	1.15"	.134 lb	



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

MATERIAL LIST PART SPECIFICATION BODY / BODY END DZR COPPER ALLOY CHROME PLATED STEM DZR COPPER ALLOY **BALL** DZR COPPER ALLOY CHROME PLATED **COMPRESSION NUT BRASS - CHROME PLATED FERRULE BRASS 0-RING & GASKET EPDM** TRANSITION TAILPIECE CPVC ABS - CHROME PLATED **HANDLE** SCREW STAINLESS STEEL

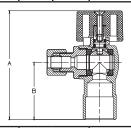




7170-LF <u>^</u>

DECODIDATION	Index Onder	DIMENSIONS		APPROX.	
DESCRIPTION	Inlet x Outlet		В	NET WT.	
STRAIGHT PATTERN CPVC x Compression	1/2 x 3/8 OD	2.80"	1.17"	.262 lb	

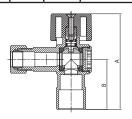




7125-LF 🧘

DECORIDATION	lul-4 04l-4	DIMENSIONS		APPROX.	
DESCRIPTION	Inlet x Outlet	Α	В	NET WT.	
	1/2 x 1/2 OD	2.46"	1.29"	.220 lb	
ANGLE PATTERN Solder x Compression	1/2 x 3/8 OD	2.46"	1.29"	.185 lb	
Coldon X Compression	1/2 x 1/4 OD	2.46"	1.29"	.182 lb	





7125DX-LF	\triangle
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DECEDITION	l-1-4 O41-4	DIMENSIONS		APPROX.	
DESCRIPTION	Inlet x Outlet	Α	В	NET WT.	
DUAL OUTLET ANGLE PATTERN Solder x Comp x Comp	1/2 x 3/8 OD x 3/8 OD	2.44"	1.28"	.237 lb	



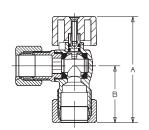
Pressure Rating: 125 PSI Non-Shock Cold Working Pressure





NIBCO PRO-Stop Supply Stops are specifically designed for use in applications that deliver water for human consumption; this includes commercial as well as residential construction.

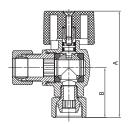




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71	45-	ᄔ	<u> </u>

DESCRIPTION	11. 0.1.	DIMENSIONS		APPROX.	
	Inlet x Outlet	Α	В	NET WT.	
ANGLE PATTERN Compression x Compression	5/8 OD x 1/2 OD	2.50"	1.33"	.261 lb	
	5/8 OD x 3/8 OD	2.50"	1.33"	.224 lb	
	5/8 OD x 1/4 OD	2.50"	1.33"	.224 lb	
	1/2 OD x 1/2 OD	2.50"	1.33"	.245 lb	
	1/2 OD x 3/8 OD	2.50"	1.33"	.205 lb	
	3/8 OD x 3/8 OD	2.23"	1.06"	.171 lb	



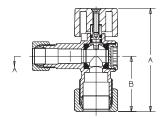


7145F-LF 🔼	\
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DESCRIPTION Inlet x Outlet		DIMEN	ISIONS	APPROX.
DESCRIPTION	Inlet x Outlet	Α	В	NET WT.
ANGLE PATTERN Female Comp x Compression	3/8 ODF x 3/8 OD	2.19"	1.03"	.176 lb

ı	MATERIAL LIST				
PART	SPECIFICATION				
BODY / BODY END	DZR COPPER ALLOY CHROME PLATED				
RETAINER	DZR COPPER ALLOY				
STEM	DZR COPPER ALLOY				
BALL	DZR COPPER ALLOY CHROME PLATED				
COMPRESSION NUT	BRASS – CHROME PLATED				
FERRULE	BRASS				
0-RING	EPDM				
HANDLE	ABS – CHROME PLATED				
SCREW	STAINLESS STEEL				

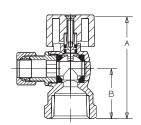




7145DX-LF 🗘

DECORIDETION Indicate the constant		DIMENSIONS		APPROX.
DESCRIPTION	Inlet x Outlet	Α	В	NET WT.
DUAL OUTLET	5/8 OD x 3/8 OD x 3/8 OD	2.51"	1.35"	.284 lb
ANGLE PATTERN Comp x Comp x Comp	5/8 OD x 3/8 OD x 1/4 OD	2.51"	1.35"	.287 lb





7155-LF 🔨

DESCRIPTION	Inlet x Outlet	DIMENSIONS		APPROX.
		Α	В	NET WT.
ANGLE PATTERN FIP x Compression	1/2 x 1/2 OD	2.25"	1.08"	.246 lb
	1/2 x 3/8 OD	2.25"	1.08"	.209 lb
	1/2 x 1/4 OD	2.25"	1.08"	.207 lb
	3/8 x 3/8 OD	2.15"	.980"	.177 lb



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



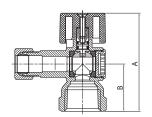
Pressure Rating: 125 PSI Non-Shock Cold Working Pressure





NIBCO PRO-Stop Supply Stops are specifically designed for use in applications that deliver water for human consumption; this includes commercial as well as residential construction.

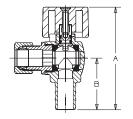




7155DX-LF 🗘

DESCRIPTION	Inlet x Outlet	DIMEN	ISIONS	APPROX.
DESCRIPTION	illiet x Outlet	Α	В	NET WT.
DUAL OUTLET	1/2 x 3/8 OD x 3/8 OD	2.25"	1.08"	.260 lb
ANGLE PATTERN FIP x Comp x Comp	1/2 x 3/8 OD x 1/4 OD	2.25"	1.08"	.263 lb



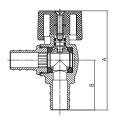


7165-LF 🔨

DECCRIPTION	Inlet x Outlet	DIMENSIONS		APPROX.
DESCRIPTION		Α	В	NET WT.
ANGLE PATTERN PEX x Compression	1/2 x 3/8 OD	2.35"	1.18"	.164 lb
	1/2 x 1/4 OD	2.35"	1.18"	.165 lb



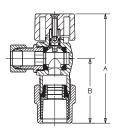




7165PEX-LF 🗘

DECODIDEION	Inlet x Outlet	DIMEN	ISIONS	APPROX.
DESCRIPTION		Α	В	NET WT.
ANGLE PATTERN PEX x PEX	1/2 x 1/2	2.35"	1.18"	.148 lb





7175-LF 🗘

DECORIDATION	Index Ontdex	DIMEN	ISIONS	APPROX.
DESCRIPTION	Inlet x Outlet	Α	В	NET WT.
ANGLE PATTERN CPVC x Compression	1/2 x 3/8 OD	2.85"	1.69"	.279 lb

Please see NIBCO® Push Catalog for all Push Lead-Free valves.



WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



NIBCO® PRO-Stop® End Connection Information

NIBCO Pro-Stop Supply Stops are available with several end connection styles and types allowing connection to a variety of supply piping as follows:

FIP (Female Iron Pipe):

Internal National Pipe Taper (NPT) threads per ASMEI B1.20.1.

MIP (Male Iron Pipe)

• External National Pipe Taper (NPT) threads per ASME B1.20.1.

Solder

 Solder cup, dimensionally compliant with ASME B16.18 or B16.22, for connection to copper tubing conforming to ASTM B88 by soldering.

PEX

Male barbed end, dimensionally compliant with ASTM F1807 and CSA B137.5, intended to be inserted inside PEX tubing and
joined using copper crimp ring or stainless steel sleeve.

CPVC

Internal socket, dimensionally compliant with ASTM D2846, for connection by solvent welding to CPVC-CTS tubing.

PUSH:

 Internal socket that utilizes an elastomeric seal that fits into an annual recess and is compressed radially upon insertion of tubing and gripper ring that holds the tubing in place. Intended for connection to copper tubing conforming to ASTM B88, CPVC-CTS tubing conforming to ASTM D2846, or PEX tubing (with tubing insert for support) conforming to ASTM F876.

Compression

Internal socket-type of connection, based on SAE J512, for joining to copper tubing conforming to ASTM B88. The radial deformation (compression) of a metallic ferrule seals and grips the tubing.

Female Comp

Internally threaded connection that connects to a valve or fitting with compression end, once the compression nut and ferrule are removed. Sealing is by means of an elastomeric seal drawn up tight against the externally threaded end of the compression connection.

Installation instructions are printed on the back side of the plastic bags containing each specific model of NIBCO 7000 Series Supply Stops.

Concerning Compression-Style Joint Assemblies

For compression-type connections we recommend connecting only copper tubing. In general, there should be no need to apply pipe sealant compound or PTFE tape to the compression joint and the nut on a compression connection should be tightened to the point of feeling resistance, then tightening no more than additional ½ turn. Do Not Overtighten.

Although compression-end style end connections will mate onto tubing of other materials, such as, CPVC-CTS and PEX tubing, NIBCO does not recommend installing compression end assemblies on any piping product other than copper tubing conforming to ASTM B88.

Lead-Free Iron Valves



Grooved End Butterfly Valves GD-4765-N

- Sizes: 2" through 12"
- Polyamide coated ductile iron body
- EPDM encapsulated disc
- NSF/ANSI 61-8 and NSF/ANSI 372
- Conforms to MSS SP-67
- Reference catalog C-BFV for spec sheet



Lug/Wafer Style Butterfly Valves

- Sizes: 2" through 12"
- · Ductile iron body
- Molded-in EPDM seat liner
- NSF/ANSI 372
- Designed to comply with MSS SP 67
- Reference catalog C-BFV for spec sheet



Silent Check Valves 900/910/920/960 Series

- 2" through 36"
- · Wafer, flanged or grooved ends
- Performance Bronze® trim
- NSF/ANSI 61-8 and NSF/ANSI-372
- Conforms to MSS SP-125
- Reference catalog C-BIV for spec sheets

Lead-Free Iron Valves



Resilient Wedge Gate Valves 607/619-RW

- Sizes: 2-1/2" through 12"
- Epoxy coated interior/exterior
- Ductile iron ASTM A536 / EPDM ASTM D2000
- Rising and non-rising stem
- NSF/ANSI 372
- Reference catalog C-BIV for spec sheets



Ductile Iron Gate Valves F-637-33

- Sizes: 2" through 24"
- OS&Y / raised face flanges
- 316 stainless steel trim
- Solid wedge
- NSF/ANSI 61-8 and NSF/ANSI 372
- Reference catalog C-BIV for spec sheets



Ductile Iron Swing Check Valves F-938-33

- Sizes: 2" through 12"
- Bolted bonnet
- 316 stainless steel trim
- Raised face flanges
- NSF/ANSI 61-8 and NSF/ANSI 372
- Reference catalog C-BIV for spec sheets

Performance Bronze® 580, 585 & 595 Series Thread, Solder and NIBCO® Press System Ball Valve Handles

A wide variety of handles are available to fulfill safety and operation requirements. The carbon steel lever handle with plastisol cover is standard and additional handle options are shown. If an optional handle is desired, please indicate which one when ordering. Some options are factory installed and some require field assembly.





Performance Bronze® Threaded, Solder and **NIBCO®** Press System Ball Valves



NIB-SFAI® Technical Data

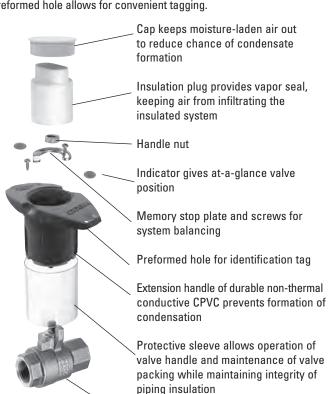
NIBCO bronze ball valves installed with NIB-SEAL insulated handles are the best approach that keeps your insulated piping system completely intact.

The revolutionary NIB-SEAL insulated handle system used with a NIBCO bronze ball valve, stops condensate, cold. Its unique thermal barrier design keeps moisture from infiltrating your insulated system while preventing thermal energy loss through exposed metal handles.

Designed for new installations or retrofitting existing systems, NIB-SEAL® bronze ball valves offer a wide range of advantages where insulated piping is desirable.

In addition, the NIB-SEAL handle was tested to UL 2043 and is UL listed for installation in air-handling spaces (plenums).

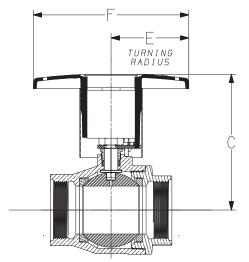
- Protective sleeve provides a stationary surface to affix the insulation, allowing operation of the valve without destroying the integrity of the insulated system.
- · High-strength CPVC cylindrical handle design features easy access to standard adjustable memory stop for system balancing.
- Cap and insulating plug provide a vapor seal to prevent exchange of air, to maximize the efficiency of your insulated piping system.
- Position indicators allow at-a-glance determination of whether valve is in open or closed position.
- · Preformed hole allows for convenient tagging.



NIBCO two-piece or three-piece

the NIB-SEAL valve system

bronze ball valve is an integral part of



	Dimensions									
	V	alve Serie	!S	Valve Series						
		580-LF		585/595-LF						
Size	С	Е	F	С	Е	F				
.250	_	_	_	3.750	2.188	4.25				
.375	_	_	_	3.750	2.188	4.25				
.500	_	_	_	3.750	2.188	4.25				
.750	_	_	_	4.000	2.188	4.25				
1.000	_	_	_	4.25	2.188	4.25				
1.250	4.250	2.188	4.25	5.375	3.375	6.50				
1.500	5.375	3.375	6.50	5.563	3.375	6.50				
2.000	5.563	3.375	6.50	5.875	3.375	6.50				
2.500	5.875	3.375	6.50	_	_	_				
*Use 58	5/595 fo	r 1/4" - 1"		,	•					

For bronze ball valves with factory-installed NIB-SEAL insulated handle, order appropriate NIBCO valve figure number with suffix "NS."

Example: T-585-80-LF-NS, 1/2"

NIB-SEAL on sweat ball valves are shipped unassembled.

Sample Specification

For piping systems requiring up to 2" of insulation, specify a non-conductive CPVC extended-handle bronze ball valve tested to UL 2043, is UL listed for installation in air handling spaces (plenums), that offers a vapor seal, adjustable memory stop, position indicators and convenient valve packing maintenance—all without disturbing the insulation. Specify NIB-SEAL insulated handle.

Example: T-585-80-LF-NS

NIB-SEAL® Locking Handle

U.S. PATENT 9,810,344

The patented technology of the 3-in-1 NIB-SEAL locking handle solves three problems at once: **it extends**, **it insulates**, and **it locks**. The innovative locking handle design extends valve actuation to provide ample room for insulating around piping systems, and its unique thermal barrier system prevents heat transfer and condensate development. The NIB-SEAL locking handle also allows the valve to be locked in the full open or closed position to prevent incidental actuation.

Designed for new installations, the NIB-SEAL locking handle is engineered to work with NIBCO® bronze ball valves.**

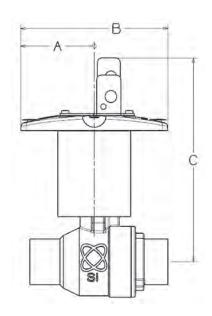
Applications: For piping systems requiring up to 2" of insulation, specify a non-conductive CPVC extended-locking handle bronze ball valve tested to UL 2043, and UL listed for installation in air handling spaces. The assembly offers a vapor seal, position indicators, locking device, and actuation without disturbing the insulation. Designed for new installations, the NIB-SEAL locking handle installed on bronze ball valves offers a wide range of advantages for typical commercial HVAC systems as well as industrial applications where insulated piping with a locking device is desirable. Specify NIB-SEAL insulated locking handle.

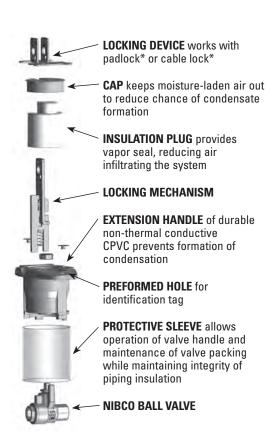
Approvals: UL 2043

Safety Lock Compatibility: Cable lock as small as 1/8" diameter to padlock as big as 0.33" diameter shackle.

Temperature Range: 15° F to 250° F

Not intended for steam applications in excess of 15 PSI.





- * Padlock and cable lock not included
- ** Valve type showing above is just for handle representation

LEAD-FREE: Weighted average lead content ≤ 0.25%

Dimensions

	Series 585										
Sizes		4		3	C						
	In. mm.		ln.	In. mm.		mm.					
1/4"	2.19	55.58	4.25	107.95	5.30	134.59					
3/8"	2.19	55.58	4.25	107.95	5.30	134.58					
1/2"	2.19	55.58	4.25	107.95	5.42	137.56					
3/4"	2.19	55.58	4.25	107.95	5.69	144.50					
1"	2.19	55.58	4.25	107.95	5.88	149.40					
11/4"	3.38	85.73	6.50	165.10	6.84	173.67					
1½"	3.38	85.73	6.50	165.10	7.06	179.33					
2"	3.38	85.73	6.50	165.10	7.30	185.44					

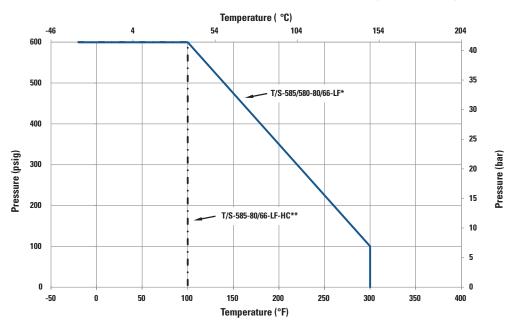
Factory installed only.

Order appropriate factory installed NIBCO valve figure number with suffix "LX". Example: T-585-70-LX, $\frac{1}{2}$ "

NIB-SEAL on solder/sweat ball valves are shipped unassembled.

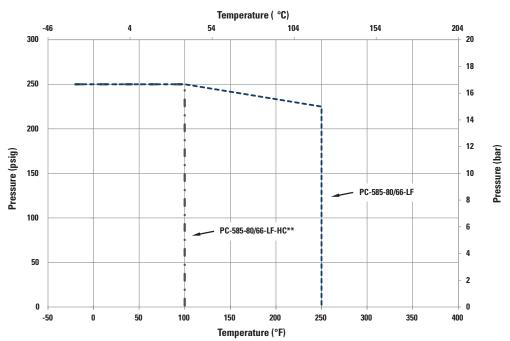
Pressure Temperature Ratings - T/S/PC-585/580-LF

PRESSURE/TEMPERATURE RATING 585/580-Series Lead-Free Bronze Ball Valve (1/4" thru 2")



^{*} Ball valves with solder cup end connections shall have maximum working pressure derated based upon a maximum service temperature of 250°F. Reference ASME B16.18 or the NIBCO Commercial Ball Valve catalog for further information.

PRESSURE/TEMPERATURE RATING 585/580-Series Lead-Free Bronze Press Ball Valve (1/2" thru 2")

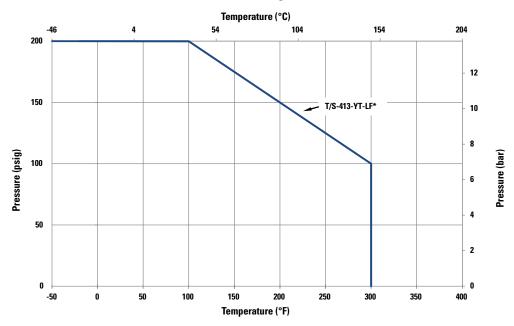


^{**} Ball valves with hose thread end connections shall have a maximum service temperature ≤100°F.

^{**} Ball valves with hose thread end connections shall have a maximum service temperature 100°F.

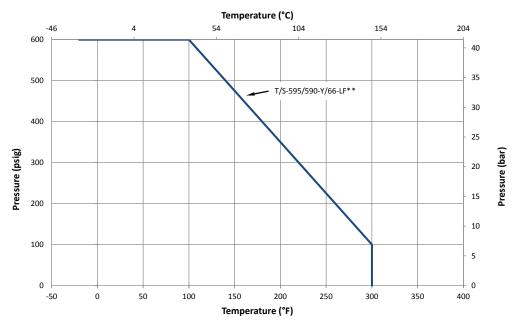
Pressure Temperature Ratings - T/S-413-Y-LF

PRESSURE/TEMPERATURE RATING 413-Y-LF Lead-Free Bronze Swing Check Valve (1/2" thru 2")



^{*} Swing check valves with solder cup end connections shall have maximum working pressure derated based upon a maximum service temperature of 250°F. Reference ASME B16.18 or the NIBCO® Bronze & Iron Valve catalog for further information.

PRESSURE/TEMPERATURE RATING 595/590-Series Lead-free Bronze Ball Valve (1/4" thru 2-1/2")



^{**} Ball valves with solder cup end connections shall have maximum working pressure derated based upon a maximum service temperature of 250°F. Reference ASME B16.18 or the NIBCO Commercial Ball Valve catalog for further information.

Engineering Data Index



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Listings, Approvals and Standards

ASME A112.4.14, *Manually Operated, Quarter-Turn Shutoff Valves for Use in Plumbing Systems,* establishes requirements for manually operated, quarter-turn valves in nominal sizes less than or equal to NPS 2. These valves are intended for indoor installation as potable water shutoff valves between the meter and the supply stop. Valves covered by this Standard are intended for service at temperatures between 34°F (1°C) and 180°F (82°C), with an allowable working pressure rating not less than 125 psi (862 kPa).

ASME A112.18.1/CSA B125.1, *Plumbing Supply Fittings,* establishes requirements for plumbing supply fittings and accessories located between the supply stop and the terminal fitting, including lawn and sediment faucets; kitchen sink, lavatory, bidet, bath, and shower supply fittings; humidifier and clothes washer supply stops; and supply stop valves.

IAPMO IGC-157, *Ball Valves,* covers ball valves in sizes NPS 1/8 to NPS 4, with rated working pressures of at least 125 psi (860 kPa), intended for water supply systems, and specifies requirements for materials, physical characteristics, performance testing, and markings.

IAPMO/ANSI Z1157, *Press Ball Valves*, in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press ends to be fully tested to IAPMO PS-117 performance requirements which includes the following additional tests:

- 1. Unrestrained Hydrostatic Pressure Test at 20 °C (68°F)
- 2. Unrestrained Hydrostatic Pressure Test at 93 °C (200°F)
- 3. Static Torsion Test for Press Connections
- 4. Bending Test
- 5. Vacuum Test

- 6. Hydraulic Shock (Water Hammer) Test
- 7. Vibration Test
- 8. Thermal Cycling Test
- 9. Alternate Thermal Cycling Test
- 10. Dynamic Torsion Test for Press Connec

MSS SP-25, *Standard Marking Systems for Valves, Fittings, Flanges and Unions,* establishes a marking system that applies to valves, fittings, flanges, and unions used in piping connections that include, but are not limited to, flanged, soldered, brazed, threaded, or welded joints. These specified markings serve to identify the manufacturer, rating designation, materials of construction, and special service limitations imposed by the manufacturer.

MSS SP-80, *Bronze Gate, Globe, Angle, and Check Valves,* establishes minimum requirements pressure-temperature ratings, materials, end connections, dimensions, marking, inspection, and testing of bronze gate, globe, angle, and check valves in Class 125, 150, 200, 300, and 350 for threaded and solder ends and Class 150 and 300 for flanged ends.

MSS SP-110, Ball Valves Threaded, Socket-Welding, Solder-Joint, Grooved, and Flared Ends, covers carbon steel, alloy steel, stainless steel, gray cast iron, ductile iron, malleable iron and copper alloy ball valves with threaded, socket-welding, solder-joint, grooved, and flared end connections. The sizes covered range from nominal size 1/4 through 4. These valves are intended for on-off operation and should be used for modulating or throttling only when recommended by the manufacturer.

Listings, Approvals and Standards (cont...)

MSS SP-139, *Copper Alloy Gate, Globe, Angle, and Check Valves for Low Pressure/Low Temperature Plumbing Applications*, establishes requirements for pressure-temperature ratings, materials, end connections, dimensions, marking and testing of copper alloy gate, globe, angle, and check valves for use in plumbing applications and other purposes where a non-Class, Cold Working Pressure (CWP) rating is sufficient.

MSS SP-145, *Metal Ball Valves for Low Pressure/Low Temperature Plumbing Applications*, establishes requirements for pressure-temperature ratings, materials, design, dimensions, marking, and testing of ball valves with a minimum CWP rating of 125 psi (860 kPa).

NSF/ANSI 14, Plastics Piping System Components and Related Materials, establishes minimum physical, performance, and health effects requirements for plastic piping system components and related materials, including but not limited to pipes, fittings, valves, joining materials, gaskets, and appurtenances. These criteria were established for the protection of public health and the environment.

NSF/ANSI 61, *Drinking Water System Components* – Health Effects, establishes minimum requirements for the chemical contaminants and impurities that are indirectly imparted to drinking water from products, components, and materials used in drinking water systems. It is intended to cover specific materials or products that come in contact with; drinking water, drinking water treatment chemicals, or both. The products and materials covered include, but are not limited to, process media, protective materials, joining and sealing materials, pipes, and related products, mechanical devices used in treatment, transmission, or distribution systems, and mechanical plumbing devices.

- **Cold Water Application:** An end-use that is intended to result in continuous exposure to water at ambient temperature. Products are tested for an end-use temperature of 73 ± 4°F (23 ± 2°C).
- **Domestic Hot Water Application:** An end-use that is intended to result in continuous or intermittent exposure to water above that is above ambient; such as a part of the hot side of a residential piping system. Products are tested for an end-use temperature of 140 ± 4°F (60 ± 2°C).
- **Commercial Hot Water Application:** An end-use that is intended to result in continuous or intermittent exposure to water that is above ambient and domestic hot conditions; such as a part of the hot side of a commercial piping system (e.g., commercial dishwasher). Products are tested for an end-use temperature of 180 ± 4°F (82 ± 2°C).
- **Annex F:** This revision lowered the total allowable concentration (TAC) for lead from 15 μg/L to 5 μg/L and lowered the single product allowable concentration (SPAC) for lead from 1.5 μg/l to 0.5 μg/L. The requirements defined within Annex F of NSF/ANSI 61 were incorporated into the body of the standard on July 1, 2012.
- Annex G: An optional evaluation method for products that need to meet a 0.25% weighted average lead content standard. Products evaluated for compliance with Annex G must first comply with the full requirements of NSF/ ANSI 61. The method for evaluation of lead content is in accordance with NSF/ANSI 372.

NSF/ANSI 372, *Drinking Water System Components* – Lead Content, establishes procedures for the determination of lead content based on the wetted surface areas of products. This Standard applies to any drinking water system component that conveys or dispenses water for human consumption through drinking or cooking.



Sample Specification

LINE CONTROL VALVES 3" AND SMALLER

SILICON BRONZE TWO-PIECE BALL VALVES – **THREAD AND SOLDER:** Valves shall be rated 600 PSI non-shock CWP and will have 2-pc. Lead-free dezincification-resistant body, end piece, stem and ball, PTFE seats, full port, separate pack nut with adjustable stem packing, anti-blowout stems and have the capability of accepting extended operating handles. Valve ends shall have full depth ANSI threads or extended solder connections. Valves shall conform to MSS SP-110 and be 3rd party certified to NSF/ANSI-61-8 (commercial hot 180°F), NSF/ANSI-372, and IAPMO IGC-157.

ACCEPTABLE VALVES: NIBCO® T-585-80-LF (thread): S-585-80-LF (solder) or T-585-66-LF (thread): S-585-66-LF (solder)

NIB-SEAL®: Where piping is insulated, ball valves shall be equipped with 2" extended handles of non-thermal conductive material that meets UL 2043 approved for inside air plenum. Also provide a protective sleeve that allows operation of the valve without breaking the vapor seal or disturbing the insulation. Memory stops, which are fully adjustable after insulation is applied, shall be included.

ACCEPTABLE VALVES:

NIBCO® T-585-80-LF-NS (thread); S-585-80-LF-NS (solder) or T-585-66-LF-NS (thread); S-585-66-LF-NS (solder)

SILICON BRONZE BALL VALVES – PRESS SYSTEM®: Valve body rated to 600 PSI non-shock CWP, connections rated to 250 PSI CWP, Lead-free dezincification-resistant body, end piece, stem and ball, PTFE seats, full port, separate pack nut with adjustable stem packing, anti-blowout stems and have the capability of accepting extended operating handles. Valve ends shall be wrot copper ASTM B75 alloy for copper to copper pipe connections. Valves shall conform to MSS SP-145 and be 3rd party certified to NSF/ANSI-61-8 (commercial hot 180°F), NSF/ANSI-372, and IAPMO IGC-157.

ACCEPTABLE VALVES: NIBCO® PC-585-80-LF or PC-585-66-LF

SILICON BRONZE THREE-PIECE BALL VALVES: Valves shall be rated 600 PSI non-shock CWP and will have 3-pc. Lead-free dezincification-resistant body, end pieces, stem and ball, PTFE seats, full port, separate pack nut with adjustable stem packing, anti-blowout stems and have the capability of accepting extended operating handles. Valve ends shall have full depth ANSI threads or extended solder connections. Valves shall conform to MSS SP-110 and be 3rd party certified to NSF/ANSI-61-8 (commercial hot 180°F) and NSF/ANSI-372.

ACCEPTABLE VALVES: NIBCO® T-595-Y-LF (thread); S-595-Y-LF (solder) or T-595-Y-66-LF (thread); S-595-Y-66-LF (solder)

SILICON BRONZE GATE VALVES: Valves shall be rated 300 PSI non-shock CWP, rising or non-rising stem, screw-in bonnet, solid wedge. Body, bonnet, external stuffing box and wedge are to be of Lead-free dezincification-resistant material. Stems shall be of dezincification-resistant silicon bronze ASTM B 371 or low-zinc alloy B 99, non-asbestos packing and malleable or ductile iron hand wheel. Valve ends may be threaded or solder-type. Valves shall conform to MSS SP-139 and be 3rd party certified to NSF/ANSI-61-8 (commercial hot 180°F) and NSF/ANSI-372.

ACCEPTABLE VALVES: NIBCO® T-111-LF (thread); S-111-LF (solder); T-113-LF (thread); S-113-LF (solder)

SILICON BRONZE SWING CHECK VALVES: Valves shall be Y-pattern swing-type rated 300 PSI non-shock CWP. Body, bonnet, and disc hanger are to be of Lead-free dezincification-resistant material and PTFE seat disc. Valve ends may be thread or solder-type. Valves shall conform to MSS SP-139 and be 3rd party certified to NSF/ANSI-61-8 (commercial hot 180°F) and NSF/ANSI-372.

ACCEPTABLE VALVES: NIBCO® T-413-Y-LF (thread); S413-Y-LF (solder)

SILICON BRONZE RING CHECK VALVES: Valves shall be rated a minimum 250 PSI inline lift check, resilient disc, spring actuated. Body and end piece, to be of Lead-free dezincification-resistant material. Valves shall conform to MSS SP-139 and be 3rd party certified to NSF/ANSI-61-8 (commercial hot 180°F) and NSF/ANSI-372.

ACCEPTABLE VALVES: NIBCO® T-480-Y-LF (thread); S480-Y-LF (solder)

Sample Specification (cont...)

LINE CONTROL VALVES 2 1/2" AND LARGER

DUCTILE IRON SINGLE FLANGE BUTTERFLY VALVES: Valves shall be rated a minimum 200 PSI wafer or lug style, ductile iron body, EPDM resilient seat manufactured in accordance with MSS-SP67 Type I. Valves shall be third party certified to NSF/ANSI 372 and/or NSF/ANSI-61-G.

ACCEPTABLE VALVES:

NIBCO® WD2000 (wafer); LD2000 (lug)

DUCTILE IRON GROOVED END BUTTERFLY VALVES: Valves shall be rated a minimum 300 PSI grooved mechanical style, ductile iron body, EPDM resilient seat manufactured in accordance with MSS-SP67. Valves shall be third party certified to NSF/ANSI 372 and/or NSF/ANSI-61-G.

ACCEPTABLE VALVES:

NIBCO® GD4765N (grooved)

IRON GATE VALVES: Valves shall be rated a minimum 200 PSI flanged, bolted bonnet, Class 125/150 OS&Y or NRS, iron body manufactured in accordance with MSS-SP70 gray cast iron or MSS-SP128 ductile iron or AWWA C509/C515.Packing and gaskets to be asbestos free. Valves shall be third party certified to NSF/ANSI 372 and/or NSF/ANSI-61-G.

ACCEPTABLE VALVES:

NIBCO® F637-33; F607RW; F619RW

IRON SWING CHECK VALVES: Valves shall be rated a minimum 200 PSI flanged style Class 150, iron body manufactured in accordance with MSS SP136. Valves shall be third party certified to NSF/ANSI 372 and/or NSF/ANSI-61-G.

ACCEPTABLE VALVES:

NIBCO® F938-33

IRON CENTER GUIDED CHECK VALVES: Valves shall be center guided, sliding disc type. To be rated a minimum 200 PSI flanged/wafer style Class 125/250, iron body manufactured in accordance with MSS SP-125 cast iron. Valves shall be third party certified to NSF/ANSI 372 and/or NSF/ANSI-61-G.

ACCEPTABLE VALVES:

NIBCO® F910-LF/F960-LF (flanged); W910-LF/W960-LF (wafer)

IRON TWIN DISC CHECK VALVES: Valves shall be twin disc wafer or grooved end type. To be rated a minimum 200 PSI flanged/wafer style Class 125, iron body manufactured in accordance with ASME B16.1. Valves shall be third party certified to NSF/ANSI 372 and/or NSF/ANSI-61-G.

ACCEPTABLE VALVES:

NIBCO® W-920-W-LF (wafer); G-920-W-LF (grooved)



Chemistries and Properties of Copper Alloys

Alloy Description			1	Chemical Composition								Mech. Properties					
Type	Common	ASTM	UNS				Nom	inal %	- Max	Maximum Trace % Strength (th (PSI)†	%
F	Name/App.	ı	Vos.	Cu	Pb	Bi	Zn	Sn	Р	Fe	Ni	Si	AI	Other	UTS	YS	Elong.
Leaded Brass																	
S	Free Cutting	B 16	C 36000	61.5	2.7	-	35.4	-	-	-	-	-	-		50,000	20,000	15
Brass	Forging Brass	B 124	C 37700	59.5	2.0	-	38.0	-	-	0.3	-	-	-	-	52,000	20,000	45
Ω.	Semi-Red Brass	B 584	C 84400	81.0	7.0	-	9.0	3.0	0.02	0.4	1.0	0.005	0.005	S 0.08	29,000	13,000	18
Leaded Bronze																	
4	Commercial	B 140	C 31400	89.0	1.9	-	9.1	-	-	0.1	0.7	-	-	-	52,000	45,000	18
JZE	Ounce Metal	B 62	C 83600	85.0	5.0	-	5.0	5.0	0.05	0.3	1.0	0.005	0.005	S 0.08	30,000	14,000	20
Bronze	Navy "M"	B 61	C 92200	88.0	1.5	-	4.5	6.0	0.05	0.25	1.0	0.005	0.005	S 0.05	34,000	16,000	22
ш -	Ni Bronze	B 584	C 97600	65.0	4.0	-	6.0	4.0	0.05	1.5	20.3	0.15	0.005	S 0.08	40,000	17,000	10
Lead Free* Brass																	
	Yellow Brass YB	-	C 27450	62.5	0.25	-	37.5	-	-	0.35	-	-	-	-	63,000	47,000	25
	Yellow Brass YB	-	C 27451	63.0	0.25	-	36.9	-	0.12	-	-	-	-	-	63,000	47,000	25
s	Uninhibited YB	B 124	C 46400	60.0	0.20	-	39.2	0.7	-	0.1	-	-	-	-	69,000	46,000	27
	Inhibited YB	-	C 46500	60.0	0.20	-	39.2	0.7	-	0.1	-	-	-	As 0.04	70,000	48,000	25
Bras	Si Red Brass	B 371	C 69400	81.5	0.30	-	14.5	-	-	0.2	-	4.0	-	-	90,000	45,000	20
	Inhibited YB	B 371	C 69430	81.5	0.30	-	14.5	-	-	0.2	-	4.0	-	As 0.04	90,000	45,000	20
ree	Bismuth Brass	-	C 89320	89.0	0.09	5.0	1.0	6.0	0.3	0.2	1.0	0.005	0.005	S 0.08	40,000	20,000	30
Lead-Free	Bismuth Brass	-	C 89325	86.0	0.10	3.2	1.0	10.0	0.1	0.15	1.0	0.005	0.005	S 0.08	35,000	18,000	20
ea	Bismuth Brass	-	C 89831	89.0	0.10	3.2	3.0	3.2	0.05	0.3	1.0	0.005	0.005	S 0.08	34,000	15,000	20
_	Bismuth Brass	-	C 89833	89.0	0.09	2.2	3.0	5.0	0.05	0.3	1.0	0.005	0.005	S 0.08	37,000	17,000	28
	Bismuth Brass	-	C 89835	87.0	0.09	2.2	3.0	6.7	0.1	0.2	1.0	0.005	0.005	S 0.08	35,000	18,000	20
	Bismuth Brass	-	C 89836	89.0	0.25	2.5	3.0	5.5	-	0.35	0.9	0.005	0.005	S 0.08	37,000	19,000	30
	Bismuth Brass	B 584	C 89844	84.5	0.20	3.0	8.0	4.0	0.05	0.3	1.0	0.005	0.005	S 0.08	34,000	15,000	30
							Lea	ad Fre	e* Bro	ıze							
	Al Bronze	B 150	C 64200	91.0	0.05	-	0.5	0.2	-	0.3	0.25	1.8	7.0	Mn 0.1	90,000	55,000	28
e i	Low Si Bronze	B 98	C 65100	98.5	0.05	-	1.5	-	-	0.8	-	1.5	-	Mn 0.7	70,000	55,000	15
Bronze	Cu Si Alloy 1	B 584	C 69300	75.0	0.09	-	21.9	0.2	0.1	0.1	0.1	3.0	-	Mn 0.1	80,000	49,000	10
Br	Cu Si Alloy 1	B 584	C 87600	89.0	0.09	-	5.5	-	-	0.2	-	4.5	-	Mn 0.2	66,000	32,000	20
ee	Silicon Bronze	B 584	C 87700	89.0	0.09	-	8.0	2.0	0.15	0.5	0.25	3.0	-	Mn 0.8	58,000	23,000	3
ų,	Silicon Bronze	B 584	C 87710	86.0	0.09	-	10.0	2.0	0.15	0.5	0.25	4.0	-	Mn 0.8	50,000	21,000	2
Lead-Free	Cu Si Alloy 1	B 584	C 87850	76.0	0.09	-	20.9	0.1	0.12	0.1	0.2	3.0	-	Mn 0.1	59,000	22,000	16
Le	Tin Bronze	B 584	C 90300	87.5	0.30	-	4.0	0.05	0.2	0.2	1.0	0.005	0.005	S 0.05	45,000	21,000	30
	Al Bronze	B 148	C 95400	83.2	-	-	-	-	-	4.0	1.5	-	10.8	Mn 0.5	75,000	30,000	12
								Cop	per								
Cn	Oxygen Free Cu	B 16	C 10200	99.95	-	-	-			-		-	-	0 0.001	36,000	28,000	40
S	Phos DeOx Cu	B 16	C 12200	99.9	-	-	-	-	0.02	-	-	-	-	Cu Min	40,000	32,000	25

¹ Performance Bronze® describes a class of copper zinc alloys that have excellent mechanical properties and corrosion resistance as demonstrated through independent testing using the highest industry standards. (See http://www.nibco.com/Lead-Free/Resources/)

Data listed represents reasonable approximations suitable for general engineering use. See applicable ASTM and CDA specification references.

 $^{^{\}dagger}$ UTS = Ultimate Tensile Strength; YS = Yield Strength

Lead-Free Valve Figure Number Comparison

Noted valves 3rd party listed.

COMMER	CIAL VALVES	NIBCO	Milwaukee	Apollo (Conbraco)	Watts	
Ð	Two-Pc. Bronze Full Port	S/T-585-LF	UPBA400/450	77CLF-100/200	LFB6080/6081	
Bronze Ball	Two-Pc. Bronze Conventional Port	S/T-580-LF	UPBA100/150	70LF-100/200	LFB6000/6001	
В	Three-Pc. Bronze Full Port	S/T-595-Y-LF	UPBA300/350	82LF-100/200	_	
e v	Rising Stem Gate	S/T-111-LF	UP149/148	101S-LF/101T-LF	_	
e Gal	Non-Rising Stem Gate	S/T-113-LF	UP105/115	102S-LF/102T-LF	LFGVS/LFGV	
Bronze Gate and Check	Swing Check	S/T-413Y-LF	UP1509/509	163S-LF/163T-LF	LFCVS/LFCV	
B B	Inline Check	S/T-480Y-LF	UP1548T/548T	61-LF	LF601S/60	
	OS&Y Gate	F637-33	_	_	_	
<u> </u>	OS&Y Gate RW	F607RW	_	_	_	
Iron Gate and Check	Non-Rising Stem Gate RW	F619RW	_	_	_	
Dug Dug	Swing Check	F938-33	_	_	_	
ate 3	Center Guided Check Flanged	F910/960 LF	_	_	_	
on G	Center Guided Check Wafer	W910/960 LF	_	_	_	
_ =	Twin Disc Wafer	W920W-LF	_	_	_	
	Twin Disc Grooved	G-920-W-LF	_	_	_	
fly	Ductile Iron Single Flange Wafer	WD2000	_	_	DBF-04	
Buttterfly	Ductile Iron Single Flange Lug	LD2000	ML133E/233E/333E	_	DBF-03	
Bu	Ductile Iron Single Flange Grooved	GD4765N	_	_	_	

PLUMBIN	G VALVES	NIBCO	Milwaukee	Apollo (Conbraco)	Watts
ass / onze 3all	Two-Pc. Brass / Bronze Full Port	S/T-685-LF	UPBA475B/485B	77FLF-100/200	LFFBV-3C
Bron Bron Ba	Two-Pc. Brass Full Port	FP-600A-LF	UPBA475B/485B	94ALF	LFFBV-3C

		NIBCO	BrassCraft	Legend	Watts	
	Straight Sweat x Compression	7120-LF	KTR14X C	T594 NL	_	
	Angle Sweat x Compression	7125-LF	KTR*9X C	T595 NL	_	
	Dual Outlet Sweat x Comp x Comp	7125DX-LF	_	T597 NL	NL —	
	Straight Comp x Comp	7140-LF	KTCR*4X C	T596 NL	_	
	Straight Female Comp x Comp	7140F-LF	KTCR11FX C	T596 NL	LFBV894013	
	Angle Comp x Comp	7145-LF	KTCR*9X C	T595 NL	LFBV894**3	
္က	Angle Female Comp x Comp	7145F-LF	_	T595 NL	_	
/4-Turn Supply Stops	Dual Outlet Comp x Comp x Comp	7145DX-LF	_	T597 NL	LFBV389403	
l dd Yldd	Straight FIP x Comp	7150-LF	KTR1*X C	T596 NL FIP	LFBV890013	
n Su	Angle FIP x Comp	7155-LF	KTR**X C	T595 FIP	LFBV890*03	
<u> </u>	Dual Outlet FIP x Comp x Comp	7155DX-LF	_	T597 NL FIP	LFBV389003	
1,4	Srtaight PEX x Comp	7160-LF	KTBRPX14X C	T596 NL	_	
	Straight PEX x MIP	7160M-LF	_	_	_	
	Straight PEX x PEX	7160PEX-LF	KTBRPX44X C	T596 NL	_	
	Angle PEX x Comp	7165-LF	KTBRPX19X C	T595 NL	_	
	Angle PEX x PEX	7165PEX-LF	_	_	_	
	Straight CPVC x Comp	7170-LF	KTPR14X C	T596 NL	_	
	Angle CPVC x Comp	7175-LF	KTPR19X C	T595 NL	_	

Valve Installation

SOLDERING RECOMMENDATIONS:



1. Ensure proper joint preparation for solder cup and mating tube:

Proper joint preparation is critical in order to achieve a satisfactory solder joint - follow all best practices for prepping tube by using a coarse emery cloth or a clean wire brush, including square cutting, de-burring (inside and outside), cleaning, etc.



2. Select appropriate solder, flux and heat:

The selection of a compatible solder / flux combination is a critical first step to achieving a quality joint.

Solder: NIBCO recommends plumbing solders with a melting point above 400°F. Solders with a melting point above 400°F include traditional 95/5 tin / antimony and those containing silver or other filler elements.

Flux: The purpose of flux is to clean, prep, and protect the surfaces of the joint to accept solder. It is important that the flux utilized has an active temperature range compatible with the intended solder. Many plumbing flux and solder combinations have been confirmed for use with silicon bronze alloys. There are generally many flux types beyond plumbing — best practice calls for installers to utilize plumbing paste fluxes containing chlorides. Contact the flux manufacturer regarding the suitability of their flux for use with any intended solder. Confirming flux suitability per local plumbing code is the responsibility of the installer.





Heat: Silicon bronze alloys will transfer heat away from the heat affected area more slowly than copper or leaded bronze; therefore, more attention may be required to achieve uniform heating of the alloy. Select torch tip and gas mix to adequately distribute the heat. The hotter the flame, the more skill and technique are required.

3. Ensure sufficient joint heating:

Ball valves should be in the CLOSED position and gate valves OPEN when soldering.

Ensuring sufficient heat is critical to achieving a satisfactory solder joint.

Valve Installation (cont...)

Standard soldering techniques can be used with proper selection of a solder and flux combination.** Even, uniform heat should be accomplished by directing the inner-most flame tip (neutral flame) to the joint, remembering these critical points:

- Begin by mildly preheating the socket and tube.
- Do not direct the flame into the gap.
- Heat the entire joint, always keep the flame moving do not linger in any one position.
- Watch for the flux to activate, per flux manufacturer's recommendation. Flux will generally bubble as it reaches activation temperature, taking care not to burn out the flux.
- Apply the flame to the base of the solder cup the farthest point you want to draw the solder to.
- With uniform heating around the base of the cup, touch the solder to the joint. If the solder doesn't melt remove the solder and continue heating the entire joint.
- When the solder begins to melt, return the flame to the base of the cup, rotating the flame 360 degrees around the cup.

Due to expansion and contraction of materials after heating, the ball valve or gate valve pack nut may need to be tightened.









For soldering and peel test recommendations, review video at www.nibcoleadfree.com

BRAZING RECOMMENDATIONS:

Lead-free silicon bronze alloy brazing, including filler material selection and installation, is identical to that used in good industry practice for traditional plumbing products.

THREADING RECOMMENDATIONS:

When threading pipe, gauge pipe threads for size and length to avoid jamming pipe against seat or disc. Thoroughly clean threaded end to remove excess material shavings. For a good joint, use PTFE tape OR pipe dope. If pipe dope is used, apply sparingly on pipe threads, NEVER on valve threads. Do not allow any pipe dope into valve body in order to avoid damage to disc, ball or seat. Close valve completely before installation. Apply wrench to hex next to pipe and quard against possible distortion.

PRESS SYSTEM:

For NIBCO® Press System Engineering data, installation instructions, tool / jaw compatibility matrix, and warranty information reference NIBCO catalog C-NPS.

^{**} ASTM B828 Standard Practice for Making Capillary Joints by Soldering of Copper and Copper Alloy Tube and Fittings.

Notes



NIBCO® Pressure Rated Metal Valves **Limited Warranty**



NIBCO INC. 125% LIMITED WARRANTY

Applicable to NIBCO Pressure Rated Metal Valves

NIBCO INC. warrants each NIBCO pressure rated metal valve ("Valves") to be free from defects in materials and workmanship under normal use, service, and maintenance in accordance with the product specifications (including, but not limited to installation recommendations) for a period of five (5) years from the Warranty Commencement Date. The Warranty Commencement Date shall be the date upon which a Valve is installed.

NIBCO will repair or replace - at its option and at no charge -Valves that have been determined by NIBCO, or an authorized representative or agent thereof, to have failed solely because of a defect in materials or workmanship under normal use, service, and maintenance during the warranty period. Replacements shall be shipped free of charge to the owner. In the event of the replacement of any Valve, NIBCO shall further pay the owner the greater of twenty-five (25%) percent of the price of the Valve according to the published suggested list price schedule of NIBCO in effect at the time of purchase, or ten (\$10.00) dollars, to apply on the cost of the installation of said replacement Valve.

This limited warranty applies to all Valves installed, tested, applied, and used in accordance with NIBCO's approved and published recommendations and instructions.

This warranty does not cover any failure or damage for or caused by:

- 1. any product, parts, or systems which are not manufactured or sold by NIBCO;
- 2. any Valve which is used for purposes other than a purpose authorized by NIBCO;
- 3. any Valve not installed, tested, applied, used, or maintained in accordance with NIBCO's recommended installation guidelines and instructions;
- 4. any Valve not installed or used in accordance with applicable codes;
- 5. any damage caused by, contributed in whole or in part by, or resulting from, any of the following:
 - a. abuse, misuse, mishandling, alteration, tampering, neglect, or accidental damage such as, without limitation, vandalism;
 - b. natural disasters, such as, without limitation, flooding, windstorm, and lightning;
 - c. attachments or modifications not authorized by NIBCO;
 - d. external, physical or chemical qualities, or an unsuitable or hostile environment,;
 - e. any defects other than those in material or workmanship; or
 - f. any other cause beyond the control of NIBCO.

NIBCO DISCLAIMS ANY AND ALL LIABILITY FOR ANY OTHER DIRECT OR INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING BUT NOT LIMITED TO, ECONOMIC LOSS, LOSS OF BUSINESS, LOST PROFITS, PUNITIVE DAMAGES, MOLD INTRUSION, WATER DAMAGE, ETC.

Some states do not allow the exclusion or limitation of damages, so the above limitation or exclusion may not apply to you.

THIS WARRANTY IS THE ONLY WARRANTY FOR THE VALVES PROVIDED BY NIBCO, AND IS AND SHALL BE IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, AN IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND FOR ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF A MANUFACTURER. NO EMPLOYEE OF NIBCO, OR ANY OTHER DISTRIBUTOR, AGENT, OR OTHER PERSON OR BUSINESS, IS AUTHORIZED TO MAKE ANY OTHER WARRANTY ON BEHALF OF NIBCO.

Some states do not allow limitations on implied warranties, so the above limitation may not apply to you.

In the event any defect occurs which is believed to be covered by this warranty, NIBCO Technical Services must immediately be contacted by calling 888.446.4226 or emailing CS-TechnicalServices@ nibco.com. NIBCO Technical Services after being contacted will make further arrangements for the product's return to NIBCO at the customer's expense for review and evaluation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



how to order

State quantity, figure number and size for each valve you wish to order. See individual valve catalog pages for specific or special product designations.

HOW MANY TO ORDER

NIBCO valves are decimal packed for your convenience in handling, shipping and stock-keeping. Number in master carton varies with item.

POLICY ON RETURNS TO FACTORY

No NIBCO valves are to be returned without prior written agreement. Transportation must be prepaid. A 20% charge will be made to cover cost of rehandling and reinspection.

TECHNICAL ASSISTANCE

Engineers, contractors, wholesalers or manufacturers may obtain special or technical assistance from any factory representative of NIBCO. Write, fax or phone.

NIBCO INC. World Headquarters 1516 Middlebury Street Elkhart, IN 46516-4740 USA

Phone: 1.574.295.3000

Fax: 1.574.295.3307

Technical Service Phone: 1.888.446.4226

Fax: 1.888.336.4226

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TURN TO EXPERIENCE

Only NIBCO combines 20+ years of lead-free expertise to manufacture its vast collection of lead-free valves, fittings and flanges. Made from HydraPure[®], this silicon-based Performance Bronze[®] alloy has mechanical properties far exceeding traditional plumbing alloys.

- 3rd-party tested dezincification-resistant
- · Contains no bismuth for superb heat resistance during soldering and brazing
- NSF/ANSI-61-8 (180 F) and NSF/ANSI-372 3rd-party approvals

NIBCO keeps you ahead of regulations, ahead of the industry – and AHEAD OF THE FLOW $^{\circledR}$.

Visit nibcoleadfree.com for email alerts, white papers and more.

VALVES

Pressure-rated bronze, iron and alloy-iron gate, globe and check valves • Pressure-rated bronze ball valves • Boiler specialty valves • Commercial and industrial butterfly valves • Lined butterfly valves • Circuit balancing valves and kits • Carbon and stainless steel ball valves • ANSI flanged steel ball valves • Lined ball valves • Pneumatic and electric actuators and controls • Grooved ball and butterfly valves • High performance butterfly valves • UL/FM fire protection valves • MSS specification valves • Bronze specialty valves • Low pressure gate, globe, check and ball valves • Frostproof sillcocks • Quarter-turn supply stops • Quarter-turn low pressure valves • PVC and CPVC plumbing and industrial ball valves • Bronze and iron y-strainers • Sample valves • Sanitary valves • Lead-free valves • Hydronic valves • Labor saving valves • Press x PEX transition valves

FITTINGS

Wrot and cast copper pressure and drainage fittings • Cast copper alloy flanges • Powder coated steel companion flanges • Wrot and cast press fittings • ABS and PVC DWV fittings • Schedule 40 PVC pressure fittings • CPVC CTS fittings • CPVC CTS-to-metal transition fittings • Schedule 80 PVC and CPVC systems • Lead-free fittings • Press x PEX transition fittings • Cast bronze push fittings

LEAD-FREE: Weighted average lead content ≤0.25%

INDUSTRIAL PLASTICS

PVC and Corzan® CPVC schedule 80 fittings, true union ball and ball check valves, butterfly valves, and specialty valves • Polypropylene and Kynar® PVDF schedule 80 pipe, fittings, and true union ball and ball check valves • Pneumatic and electric actuation systems

Corzan[®] are registered trademarks of the Lubrizol Corporation Kynar[®] is a registered trademark of Arkema Inc.

eNIBCO

EDI-Electronic Data Interchange • VMI-Vendor Managed Inventory • NIBCO.com • NIBCOpartner.com





View the NIBCO lead-free soldering recommendation video.

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