



# 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: 1/2" to 4"



### **NIBCO® PUSH**

- · Brass fittings and valves
- Size range: 1/2" to 1"



### **FLANGES**

- 1-piece cast Performance Bronze
  - Size range: 1" to 6"
- 2-piece copper
  - Size range: 34" to 6"



### NIBCO® PEX PIPING SYSTEMS

- Performance Bronze fittings and valves
- Size range: 1/2" 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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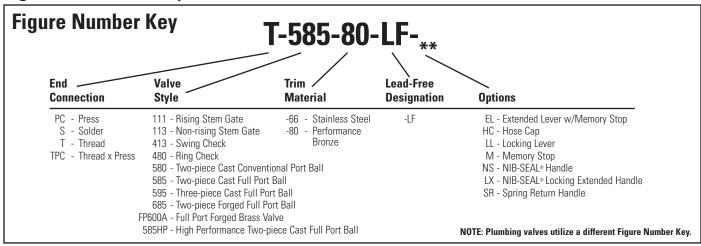
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### **HydraPure® Performance Bronze® Commercial Valves**

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.

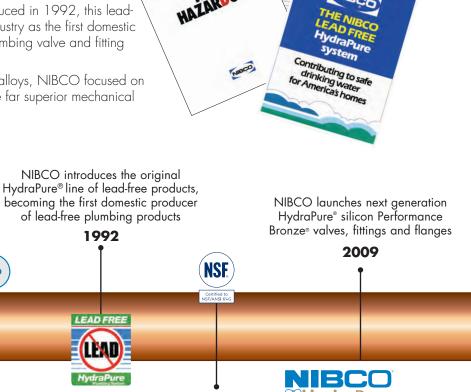
To overcome technical limitations of bismuth-based alloys, NIBCO focused on the development of silicon lead-free alloys that have far superior mechanical properties.

**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.



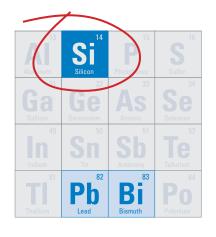


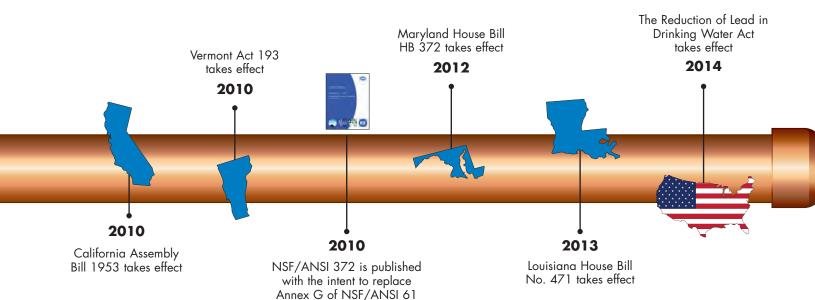
### **MELTING TEMPERATURE**

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**



### **◎** 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"

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### 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"

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#### 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

Page 25, 26



#### € 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"

Page 29, 30

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"

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#### 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"

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### 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**



#### 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"

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### 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"

Page 38, 40



#### 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"

Page 39, 41



#### 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"

Pages 54



### 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"

Pages 58

Pages 55



#### 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"

Pages 63



### 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"

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#### **Supply Stops**

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

Page 68-71

### **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 • NSF/ANSI/CAN 61-8 Commercial Hot 180° F • NSF/ANSI 372 • ICC-ES PMG-1558 • ASME A112.4.14/CSA B125.14

Size range: 1/4" - 4"

### **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 ½"): 600 psi non-shock cold working pressure
- 150 saturated steam working pressure\*

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





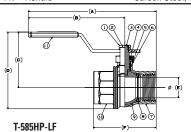


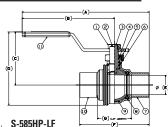


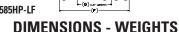


### **MATERIAL LIST**

|     | 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 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 (¼" - 1")<br>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  |









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



Handle Markings

#### **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-585 | HP-LF | S-585 | HP-LF |       | Wei   | ights |       |
|------|-------|-------|-------|-------|-------|-----|------|----------|-------|-------|-------|-------|------|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Size |       | 1     |       | 1     |       | 3   |      | <u>C</u> |       | )     |       | )     |      | <u> </u> |       | F     |       |       |       | 3     | S-585 | HP-LF | T-585 | 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 |

<sup>\*</sup>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 • NSF/ANSI/CAN 61-8 Commercial Hot 180° F • NSF/ANSI 372 • ICC-ES PMG-1558 • ASME A112.4.14/CSA B125.14

Size range: 1/4" - 4"

### **Pressure / temperature ratings:**

- T-585HP (¼"-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\*

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





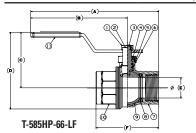


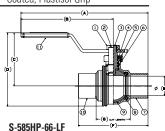


Lead-free markings: Double oval in body casting, white handle and blue hang tag

### **MATERIAL LIST**

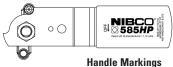
|     | PART            | SPECIFICATION   |
|-----|-----------------|---|
| 1.  | Handle Nut      | Carbon Steel, GEOMET® Coated                          |
| 2.  | Handle Stop     | ASTM A276 S31600 Stainless Steel                      |
| 3.  | Stem            | ASTM A276 S31600 Stainless Steel                      |
| 4.  | Packing         | PTFE  |
| 5.  | Packing Nut     | ASTM B16 C36000 Brass                                 |
| 6.  | Stem 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 | 1P-66-LF |        | Wei     | ghts    |         |
|-------|--------|---------|--------|---------|-------|-----|------|-----|--------|----------|---------|---------|------|----------|--------|---------|--------|---------|--------|----------|--------|---------|---------|---------|
| Size  |        | 4       |        | 1       |       | 3   | (    | ;   |        | D        |         | )       |      | <u> </u> |        | F       |        | F       |        | G        | S-585H | P-66-LF | T-585HI | P-66-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    |
| 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   |

<sup>\*</sup>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%

<sup>\*</sup>NIBCO recommends SS Ball for Hot Water and Steam applications.



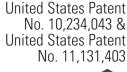


Features: Silicon Performance Bronze® Alloy • Laser-Welded Cast Body • Triple-Sealed Stem • Reversible Handle • Easily Adjustable Packing Nut • Blowout-Proof Stem • Press Ends Leak Detection

Approvals: MSS-SP110/145 • IAPMO/ANSI Z1157 • NSF/ANSI/CAN 61-8 Commercial Hot 180° F • NSF/ANSI 372 • ICC-ES PMG-1558 • ASME A112.4.14/CSA B125.14

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")











PC-585HP-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 C69300 Lead-free Silicon Bronze  |
| 4.  | Packing               | PTFE  |
| 5.  | Packing Nut           | ASTM B16 C36000 Brass   |
| 6.  | Stem 0-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 B584 C46500 DZR Lead-free Brass (½" - 1")<br>ASTM A276 S31600 or A351 CF8M Stainless Steel (11/4" -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  |

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

### 3(4)(5)(6) (1)(2) (ċ) (D (11)

PC-585HP-LF

### **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   |      | E   |       |     | G    |     | Weights |       |
|------|-------|-----|-------|-----|------|-----|------|-----|------|-----|-------|-----|------|-----|---------|-------|
| In.  | ln.   | mm. | ln.   | mm. | In.  | 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 |

00 Handle Markings

\*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 ● NSF/ANSI/CAN 61-8 Commercial Hot 180° F ● NSF/ANSI 372 ● ICC-ES PMG-1558 ● ASME A112.4.14/CSA B125.14

**Pressure/Temperature Rating:** 

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

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







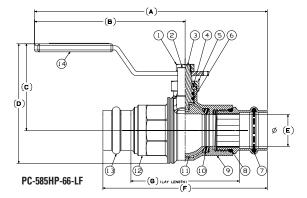


Lead-free markings: Double oval in body casting, white handle and blue hang tag

### **MATERIAL LIST**

|     | PART                  | SPECIFICATION   |
|-----|-----------------------|---|
| 1.  | Handle Nut            | Carbon Steel, GEOMET® Coated                          |
| 2.  | Handle Stop           | ASTM A276 S31600 Stainless Steel                      |
| 3.  | Stem                  | ASTM 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          |





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**Handle Markings** 

### Handle Options:

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

### **DIMENSIONS - WEIGHTS**

| Size | <u> </u> |     | A B   |     |      | C   |      | D   |      | E   |       | E   | G    |     | Weights |       |
|------|----------|-----|-------|-----|------|-----|------|-----|------|-----|-------|-----|------|-----|---------|-------|
| In.  | ln.      | mm. | In.   | mm. | In.  | mm. | In.  | mm. | In.  | 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





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 • NSF/ANSI/CAN 61-8 Commercial Hot 180° F • NSF/ANSI 372 • ICC-ES PMG-1558 • ASME A112.4.14/CSA B125.14

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



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









### **MATERIAL LIST**

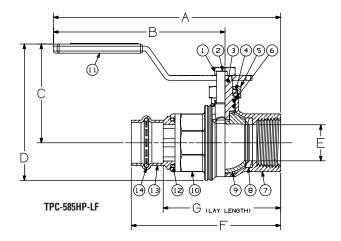
|     | PART                  | SPECIFICATION  |
|-----|-----------------------|--|
| 1.  | Handle Nut            | Carbon Steel, GEOMET® Coated   |
| 2.  | Handle Stop           | ASTM A276 S31600 Stainless Steel   |
| 3   | Ctam                  | ASTM C69300 Lead-free Silicon Bronze   |
| ٥.  | Stem                  | ASTM A276 316 Stainless Steel  |
| 4.  | Packing               | PTFE   |
| 5.  | Packing Nut           | ASTM B16 C36000 Brass  |
| 6.  | Stem 0-ring (2)       | Qmonix® EPDM   |
| 7.  | 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")<br>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



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



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### **DIMENSIONS - WEIGHTS**

| Size  | ze A |       | B    |       | C    |      | 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 |
| 11/4" | 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.

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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: Weighted average lead content ≤ 0.25%



**Handle Markings** 





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

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





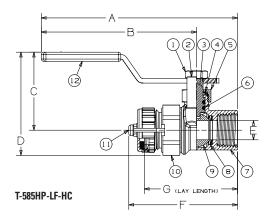


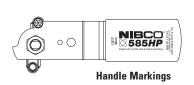
### **MATERIAL LIST**

|     | PART              | SPECIFICATION   |
|-----|-------------------|---|
| 1.  | Handle Nut        | Carbon Steel, GEOMET® Coated                          |
| 2.  | Handle Stop       | ASTM A276 S31600 Stainless Steel                      |
| 3   | Stem              | ASTM B371 DZR Lead-free Silicon Brass                 |
| ٥.  | 216III            | 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          |



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





### **DIMENSIONS - WEIGHTS**

| Size | e A  |        | В    |        | С    |       | 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 | 129.79 | 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 |
| 3/1" | 5.52 | 140 21 | 4 18 | 106 17 | 2.31 | 58 67 | 3 18 | 80 77 | N 75 | 19.05 | 3 13 | 79.50 | 2 72 | 69 09 | 1 062   | N 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 SP-110/145 • NSF/ANSI 61/372 • IAPMO/ANSI Z1157

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. 11.131.403





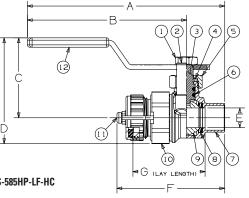


### **MATERIAL LIST**

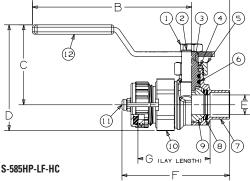
| PART              | SPECIFICATION  |
|-------------------|--|
| Handle Nut        | Carbon Steel, GEOMET® Coated   |
| Handle Stop       | ASTM A276 S31600 Stainless Steel   |
| Ctom              | ASTM B371 C69300 Lead-free Silicon Bronze  |
| Stelli            | ASTM A276 316 Stainless Steel  |
| Packing           | PTFE   |
| Packing Nut       | ASTM B16 C36000 Brass  |
| Stem O-ring (2)   | Omonix® EPDM   |
| Body              | ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting  |
| Seats (2)         | Reinforced PTFE  |
| Dall              | ASTM B584 C46500 DZR Lead-free Brass   |
| Ddll              | ASTM A276 or A351 CF8M Stainless Steel   |
| Body End Piece    | ASTM B371 C69300 DZR Lead-free Silicon Brass   |
| Hose Cap Assembly | HPB58-3 Brass  |
| Handle            | Carbon Steel, GEOMET® Coated, Plastisol Grip   |
|                   | Handle Nut Handle Stop Stem Packing Packing Nut Stem O-ring (2) Body Seats (2) Ball Body End Piece Hose Cap Assembly |



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



0 ()



### **DIMENSIONS - WEIGHTS**

| Size |      | Α      |      | В      |      | <u> </u> | Wei   | ghts  |
|------|------|--------|------|--------|------|----------|------|----------|------|----------|------|----------|------|----------|-------|-------|
| In.  | 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.



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

**Handle Markings** 





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 SP-110/145 • NSF/ANSI 61/372 • IAPMO/ANSI Z1157

Size range: ½", ¾"

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







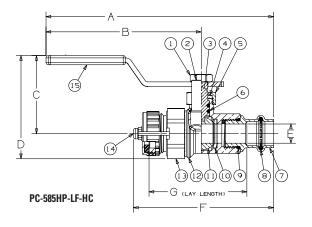


### **MATERIAL LIST**

| PART         SPECIFICATION           1. Handle Nut         Carbon Steel, GEOMET® Coated           2. Handle Stop         ASTM A276 S31600 Stainless Steel           3. Stem         ASTM C69300 DZR Lead-free Silicon Brass 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 0-ring         EPDM           10. Seats (2)         Reinforced PTFE |        |
|---|--------|
| 2. Handle Stop ASTM A276 S31600 Stainless Steel  3. Stem ASTM C69300 DZR Lead-free Silicon Brass 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 0-ring EPDM  |        |
| 3. Stem  ASTM C69300 DZR Lead-free Silicon Brass 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 0-ring EPDM  |        |
| Stem     ASTM A276 316 Stainless Steel      Packing     PTFE     Packing Nut     ASTM B16 C36000 Brass     Commonix® EPDM     Press End Adapter     Crimp Evident Seal     Press O-ring     Press O-ring     EPDM   |        |
| 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 0-ring EPDM   |        |
| 5. Packing Nut ASTM B16 C36000 Brass 6. Stem O-ring (2) Qmonix® EPDM 7. Press End Adapter C12200 Wrought Copper 8. Crimp Evident Seal EPDM 9. Press O-ring EPDM   |        |
| 6. Stem O-ring (2) Omonix® EPDM 7. Press End Adapter C12200 Wrought Copper 8. Crimp Evident Seal EPDM 9. Press O-ring EPDM  | -      |
| 7. Press End Adapter C12200 Wrought Copper 8. Crimp Evident Seal EPDM 9. Press O-ring EPDM  | -      |
| 8. Crimp Evident Seal EPDM 9. Press O-ring EPDM   |        |
| 9. Press O-ring EPDM  |        |
|   |        |
| 10 Spate (2) Reinforced PTEE  |        |
| 10. Seats (2) Heilitoteet i ii L  |        |
| 11. Ball ASTM B584 46500 DZR Lead-free Brass  |        |
| ASTM A276 or A351 CF8M Stainless Steel  |        |
| 12. Body ASTM B584 C87500 DZR Lead-free Silicon Bronze Ca   | asting |
| 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 | Size A |        | В    |        | C    |       |      | D     | E    |       | F    |        | G    |       | Weights |       |
|------|--------|--------|------|--------|------|-------|------|-------|------|-------|------|--------|------|-------|---------|-------|
| In.  | In.    | mm.    | ln.  | mm.    | In.  | mm.   | ln.  | mm.   | ln.  | 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. **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.







**Features:** Silicon Performance Bronze<sup>®</sup> Alloy • Two-Piece Body • Full Port • Blowout-Proof Stem

Approvals: MSS SP-110/145 • IAPMO/ANSI Z1157 •

NSF/ANSI 61/372-8 Commercial Hot 180°F

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







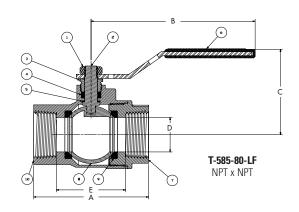


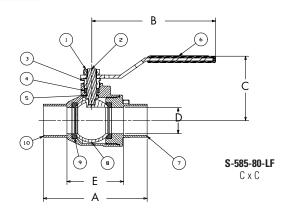
### **MATERIAL LIST**

| 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 (1/4"-1")                          |
| 9.   | Ddll           | Stainless Steel ASTM A276 S31600 or ASTM A351CF8M (11/4"-3") |
| 10.  | Body           | Silicon Bronze ASTM B584 Alloy C87600                        |



**S-585-80-LF** Solder





### **DIMENSIONS—WEIGHTS—QUANTITIES**

|      |     |       | Dimensions |       |        |      |     |      |     |      |     |       |        |       |        |             |      |             |      |           |
|------|-----|-------|------------|-------|--------|------|-----|------|-----|------|-----|-------|--------|-------|--------|-------------|------|-------------|------|-----------|
|      |     | T-585 | -80-LF     | S-585 | -80-LF |      |     |      |     |      |     | T-585 | -80-LF | S-585 | -80-LF |             |      |             |      |           |
| SI   | ZE  |       | ١          |       | 4      | В    |     | С    |     | D    |     | E     |        | E     |        | T-585-80-LF |      | S-585-80-LF |      | Master    |
| 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   | 1.78  | 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 Markings** 

### **Handle Options:**

- Stainless Steel Lever
- NIB-Seal<sup>®</sup>
- NIB-Seal<sup>®</sup> 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

Approvals: MSS SP-110/145 • IAPMO/ANSI Z1157 •

NSF/ANSI 61/372-8 Commercial Hot 180°F

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







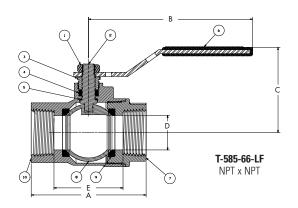


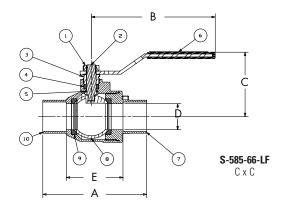
### **MATERIAL LIST**

| PART              | SPECIFICATION                                     |
|-------------------|---|
| 1. Handle Nut     | Zinc Plated Steel                                 |
| 2. Stem           | 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             |
|                   |   |



**S-585-66-LF** Solder





### **DIMENSIONS—WEIGHTS—QUANTITIES**

|      |     |        |        |       |        |      |     | Dime | nsion    | s    |     |       |          |       |        |       |        |       |        |           |
|------|-----|--------|--------|-------|--------|------|-----|------|----------|------|-----|-------|----------|-------|--------|-------|--------|-------|--------|-----------|
|      |     | T-585- | -66-LF | S-585 | -66-LF |      |     |      |          |      |     | T-585 | -66-LF   | S-585 | -66-LF | •     |        |       |        |           |
| SI   | ZE  |        | 1      |       | ۸      |      | 3   |      | <u> </u> |      | D   |       | <u> </u> |       | E      | T-585 | -66-LF | S-585 | -66-LF | Master    |
| ln.  | mm. | In.    | mm.    | In.   | mm.    | In.  | mm. | In.  | mm.      | In.  | mm. | In.   | mm.      | In.   | mm.    | Lbs.  | Kg.    | Lbs.  | Kg.    | Ctn. Qty. |
| 1/4  | 8   | 1.78   | 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         |



**Handle Markings** 

### **Handle Options:**

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

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 • Press Ends Leak Detection • Full Port • Blowout-Proof Stem

Approvals: MSS SP-110/145 • IAPMO/ANSI Z1157 • NSF/ANSI 61/372-8 Commercial Hot 180°F

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









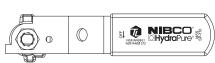


### **MATERIAL LIST**

|     |                       | IAI LIIIAL LIOI   |
|-----|-----------------------|---|
|     | 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")<br>Stainless Steel ASTM A276 S31600<br>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   |

### **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
- Wina
- Horizontal and Vertical Chain

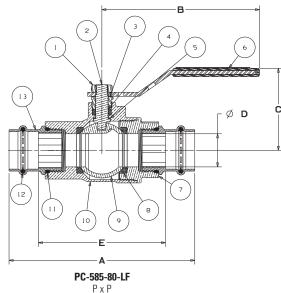


**Handle Markings** 



PC-585-80-LF

Press x Press Female End



#### DIMENSIONS— -WEIGHTS

|     | SI   | ZE  |       | 1   |      | <u> </u> | C    | <u>;                                    </u> |      | <u> </u> |      | <u> </u> | Wei   | ight |
|-----|------|-----|-------|-----|------|----------|------|--|------|----------|------|----------|-------|------|
|     | In.  | mm. | In.   | mm. | In.  | mm.      | ln.  | 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 |
|     | 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 |

\*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® Two-Piece Body • Copper Ends • Full Port •

Blowout-Proof Stem • Stainless Trim

**Approvals:** MSS SP-110/145 • IAPMO/ANSI Z1157 •

NSF/ANSI 61/372-8 Commercial Hot 180°F

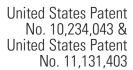
Size range: 1/2" - 3"

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

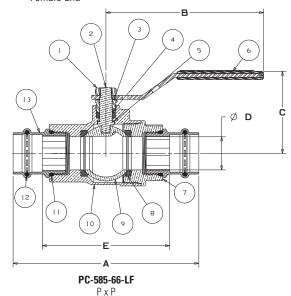






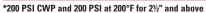
### PC-585-66-LF

Press x Press Female End



### **DIMENSIONS—WEIGHTS—QUANTITIES**

| SI    | ZE  |       | 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 |



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 SP-110/145 • IAPMO/ANSI Z1157 •

NSF/ANSI 61/372-8 Commercial Hot 180°F

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**

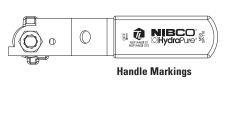
|     | IV                | IAI LNIAL LISI                        |
|-----|-------------------|---------------------------------------|
|     | PART              | SPECIFICATION                         |
| 1.  | Handle Nut        | Plated Steel                          |
| 2.  | Stem              | Silicon 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     |
|     |                   |                                       |

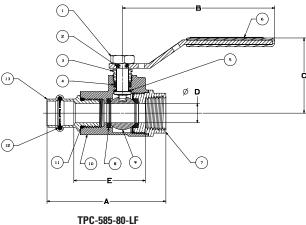


TPC-585-80-LF
Thread x Press
Female

### **Handle Options:**

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





NPT x P

### **DIMENSIONS—WEIGHTS**

| NOM   | SIZE |      | A   | E    | 3   | (    | ;   |      | )   |      |     |      | F   | (    | 3   |       | J   | 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 SP-110/145 • IAPMO/ANSI Z1157 •

NSF/ANSI 61/372-8 Commercial Hot 180°F

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

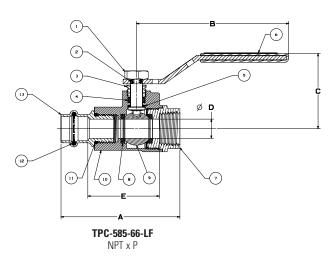






TPC-585-66-LF

Thread x Press Female



### **DIMENSIONS—WEIGHTS**

| NOM   | SIZE |      | 4   | E    | 3   |      | ;   |      | D   | - 1  |     |      | F   | (    | 3   | J     | ı   | We   | ight | Master    |
|-------|------|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|-------|-----|------|------|-----------|
| In.   | mm.  | In.  | mm. | In.  | mm. | In.  | mm. | In.  | mm. | In.  | mm. | ln.  | 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 SP-110/145 • IAPMO/ANSI Z1157 •

NSF/ANSI 61/372-8 Commercial Hot 180°F

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



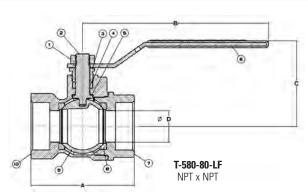






### **MATERIAL LIST**

|     | PART           | SPECIFICATION                         |
|-----|----------------|---------------------------------------|
| 1.  | Nut, Handle    | Steel, Plated                         |
| 2.  | Stem           | Silicon Bronze ASTM B371 Alloy C69300 |
| 3.  | Pack Gland     | Brass ASTM B16 Alloy C36000           |
|     | 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 |



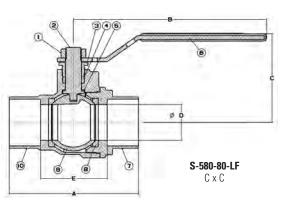
### **Handle Options:**

- 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")





### Handle Markings



### **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> </u> |      | )   |       | E      |       | E       |      | F   |       | G      |       | G      |        | J     |       | J      | T-580 | -80-LF | S-580 | -80-LF | Master    |
| In.           | mm. | In.   | mm.    | In.   | 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         |
| $3^{\dagger}$ | 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

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

NSF/ANSI 61/372-8 Commercial Hot 180°F

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





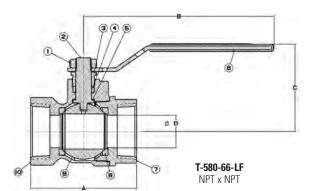


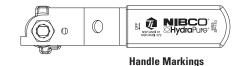


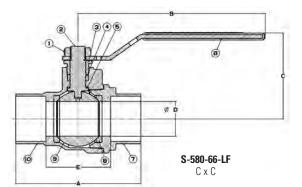
### **MATERIAL LIST**

| PART           | SPECIFICATION   |
|----------------|---|
| Nut, Handle    | Steel, Stainless  |
| Stem           | Stainless Steel ASTM A276 Type 316  |
| Pack Gland     | Brass ASTM B16 Alloy C36000   |
| Packing, Stem  | Virgin PTFE   |
| Washer, Thrust | Reinforced PTFE   |
| Handle         | Steel, Plated Plastisol Coated  |
| End Piece      | Silicon Bronze ASTM B584 Alloy C87600   |
| Seat Ring      | Reinforced PTFE   |
| Ball (Vented)  | Stainless Steel ASTM A276 Type 316  |
| Body           | Silicon Bronze ASTM B584 Alloy C87600   |
|                | Nut, Handle Stem Pack Gland Packing, Stem Washer, Thrust Handle End Piece Seat Ring Ball (Vented) |









### **Handle Options:**

- NIB-Seal® (up to 2-1/2")
   Extended le
- 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**

|       |     |        |       |       |        |      |     |      |          |      |     |        | )ime     | 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  |        | ١     |       | Α      |      | 3   |      | <u> </u> |      |     |        | <u> </u> |       | E      |      | F   |       | G      |       | <u> </u> |       | <u> </u> |       | <u></u> | T-580 | -66-LF | S-580 | -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. |
| 1-1/4 | 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

<u>^</u>

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 SP-110/145 • NSF/ANSI 61/372

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









### **MATERIAL LIST**

|     | 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 <sup>1</sup> | Die Cast Brass, EPDM Gasket, Soft PVC Retainer |
| 1   |                                |  |

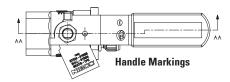
<sup>&</sup>lt;sup>1</sup> Cap is for hose end thread protection only. Not to be used for pressure containing purposes.

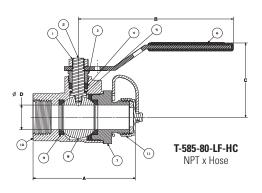
Note: valves designed to MSS SP 110 with exception of the hose end connection which is not covered by the standard.

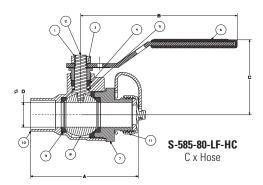


### S-585-80-LF-HC

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 | Sol  | der |      |     |      |      |      |      |          |
|-----|-----|------|-----|------|-----|------|----------|------|-----|------|-----|------------|-----|------|-----|------|-----|------|------|------|------|----------|
| SI  | ZE  |      | A   |      | 3   |      | <u> </u> |      | D   |      | Ε   | F          |     |      | F   | (    | 3   | Thr  | ead  | Sol  | der  | Master   |
| ln. | mm. | In.  | mm. | ln.  | mm. | ln.  | mm.      | ln.  | mm. | ln.  | mm. | n. In. 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 SP-110/145 • NSF/ANSI 61/372

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

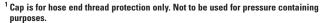








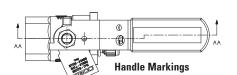
|     | N                              | MATERIAL LIST   |
|-----|--------------------------------|---|
|     | PART                           | SPECIFICATION   |
| 1.  | Handle Nut                     | Steel, Plated   |
| 2.  | Stem                           | Stainless Steel ASTM A 276 Type 316                         |
| 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                           | Stainless Steel ASTM A 276 Type 316 or ASTM A 351 Type CF8M |
| 10. | Body                           | Silicon Bronze ASTM B584 Alloy C87600                       |
| 11. | Hose Cap Assembly <sup>1</sup> | Die Cast Brass, EPDM Gasket, Soft PVC Retainer              |

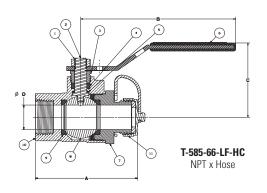


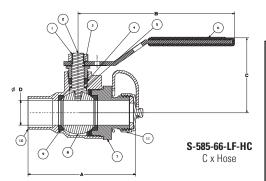
Note: valves designed to MSS SP 110 with exception of the hose end connection which is not covered by the standard.



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







#### **Handle Options:**

- Stainless Steel Lever
- NIB-Seal<sup>®</sup>
- 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**

|     |            |      |     |      |     |      |     |      |     |      |     |        |     |        |     |        | We   | ight |      |          |
|-----|------------|------|-----|------|-----|------|-----|------|-----|------|-----|--------|-----|--------|-----|--------|------|------|------|----------|
| SI  | SIZE A B C |      |     |      |     | D E  |     |      | F G |      |     | Thread |     | Solder |     | 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 SP-110/145 • IAPMO/ANSI Z1157 • NSF/ANSI 61/372









### 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

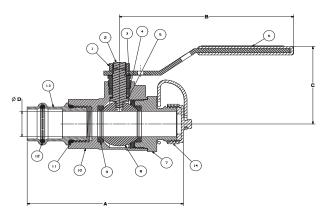
### **MATERIAL LIST**

|     | l l                            | MAILIMALLIOI                                   |
|-----|--------------------------------|--|
|     | 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 <sup>1</sup> | Die Cast Brass, EPDM Gasket, Soft PVC Retainer |
|     |                                |  |

<sup>&</sup>lt;sup>1</sup> 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



PC-585-80-LF-HC P x Hose

#### **Handle Options:**

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



Handle Markings

### **DIMENSIONS—WEIGHTS—QUANTITIES**

| SI  | SIZE |      | A   |      | A B |      | B C |      | <u>C</u> <u>D</u> |      | )   |      | <u> </u> |      | <u> </u> | G     |      | Weight |  |
|-----|------|------|-----|------|-----|------|-----|------|-------------------|------|-----|------|----------|------|----------|-------|------|--------|--|
| In. | mm.  | In.  | mm. | In.  | mm. | In.  | mm. | In.  | mm.               | In.  | mm. | ln.  | 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 SP-110/145 • IAPMO/ANSI Z1157 • NSF/ANSI 61/372

NSF/ANSI 61 & 372



IAPMO/ANSI Z1157





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

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

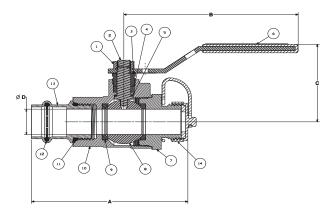
Lead-free markings: Double oval in body casting, white handle and blue hang tag

### **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 <sup>1</sup> | Die Cast Brass, EPDM Gasket, Soft PVC Retainer |
|     |                                |  |

<sup>&</sup>lt;sup>1</sup> Cap is for hose end thread protection only. Not to be used for pressure containing purposes.

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



PC-585-66-LF-HC

### **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**

| SIZE |     | A    |     |      | B   |      | C   |      | )   |      | E   | F    |     | G    |     | Weight |      |
|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|--------|------|
| 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







MSS SP-110/145 • NSF/ANSI/CAN 61-8 COMMERCIAL HOT 180° F • NSF/ANSI 372

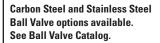
### **MATERIAL LIST**

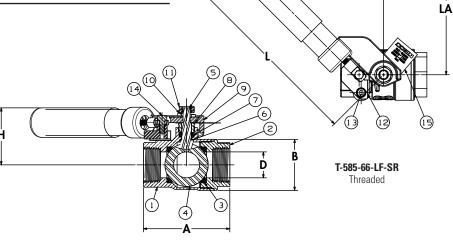
| PART                          | SPECIFICATION   |
|-------------------------------|---|
| 1. Body                       | ASTM B584 C87600 DZR Lead-free Silicon Bronze Casting |
| 2. Body End Piece             | ASTM B584 C87600 DZR Lead-free Silicon Bronze Casting |
| 3. Seats (2)                  | 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   |      |      |
| ln.   | 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 MSS SP-110/145 • NSF/ANSI/CAN 61-8 COMMERCIAL HOT 180° F • NSF/ANSI 372





### **MATERIAL LIST**

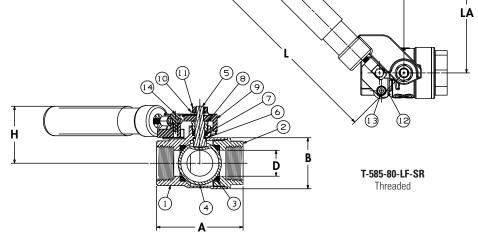
| PART                          | SPECIFICATION   |
|-------------------------------|---|
| 1. Body                       | ASTM B584 C87600 DZR Lead-free Silicon Bronze Casting     |
| 2. Body End Piece             | ASTM B584 C87600 DZR Lead-free Silicon Bronze Casting     |
| 3. Seats (2)                  | Reinforced PTFE   |
| 4. Ball (Vented)              | ASTM B584 C46500 DZR Lead-free Brass (1/4" - 1")          |
| 4. Daii (Veiileu)             | 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

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



### **DIMENSIONS—WEIGHTS**

|       |       | Dimensions |     |      |     |      |     |      |     |      |     |      |     |      |     |      |      |
|-------|-------|------------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|
| S     | ize   |            | Α   |      | В   |      | C   |      | Н   |      | L   |      | A   | LB   |     |      |      |
| In.   | mm.   | In.        | mm. | In.  | mm. | In.  | mm. | In.  | mm. | In.  | mm. | ln.  | 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

MSS SP-110/145 • NSF/ANSI/CAN 61-8 COMMERCIAL HOT 180° F • NSF/ANSI 372





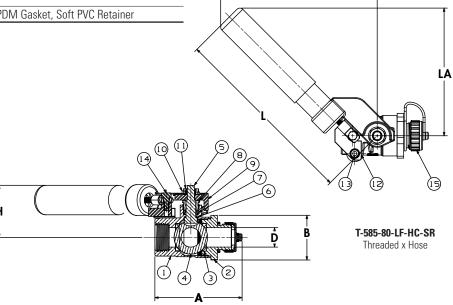
### **MATERIAL LIST**

|     | 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   |            | A   |      | 3   |      |     |      | 1   |      | L   |      | A   | L    | В   |      |      |
| In. | mm.   | In.        | mm. | ln.  | 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

MSS SP-110/145 • NSF/ANSI/CAN 61-8 COMMERCIAL HOT 180° F • NSF/ANSI 372





### **MATERIAL LIST**

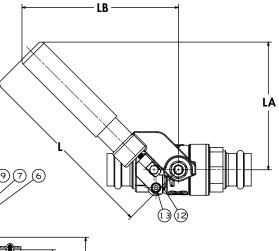
|     |                           | INIAI LNIAL LIST  |
|-----|---------------------------|---|
|     | PART                      | SPECIFICATION   |
| 1.  | Body                      | ASTM B584 C87600 DZR Lead-free Silicon Bronze Casting     |
| 2.  | Body End Piece            | ASTM B584 C87600 DZR 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 (Venteu)             | 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)                                     |
|     |                           |   |



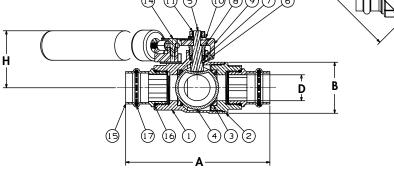
PC-585-80-LF-SR

Press x Press





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



### **DIMENSIONS—WEIGHTS**

|        | Dimensions Size A B C H L LA LB |      |     |      |     |      |     |      |     |      |     |      |     |      |     |      |      |
|--------|---------------------------------|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|
| Size A |                                 |      |     | В    | С   |      | 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

MSS SP-110/145 • NSF/ANSI/CAN 61-8 COMMERCIAL HOT 180° F • NSF/ANSI 372





#### **MATERIAL LIST**

|     |                           | MAILIMALLIST  |
|-----|---------------------------|---|
|     | 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        |

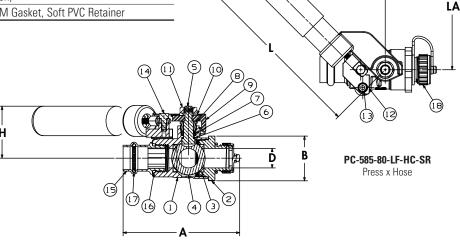


PC-585-80-LF-HC-SR

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.





### **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-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**

|     |                     | IAI EIIIAE EIOI                                   |
|-----|---------------------|---|
|     | 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<br>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<br>ASTM A449 Grade 5 |
| 14. | Handle Sleeve       | Zinc Plated Steel                                 |

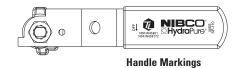




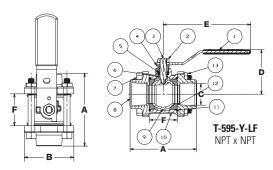
S-595-Y-LF Solder

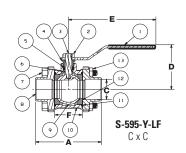
T-595-Y-LF

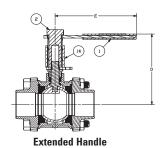
Threaded



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







Representation for Suffix -EL

**DIMENSIONS—WEIGHTS—QUANTITIES** 

|            |     | Dimensions  |                   |      |     |          |     |      |                    |      |     |      |          |      |     |      |          |       |      |              |                       |       |             |           |
|------------|-----|-------------|-------------------|------|-----|----------|-----|------|--------------------|------|-----|------|----------|------|-----|------|----------|-------|------|--------------|-----------------------|-------|-------------|-----------|
|            |     | T-595       | 5-Y-LF S-595-Y-LF |      | -   |          |     |      | w/ Extended Handle |      |     |      |          |      |     |      |          |       |      |              |                       |       |             |           |
| Si         | ze  |             | <u> </u>          | A    |     | <u>B</u> |     | C    |                    | D    |     |      | <u> </u> |      |     |      | <u> </u> | F     |      | <u>T-595</u> | T-595-Y-LF S-595-Y-LF |       | <u>/-LF</u> | Master    |
| <u>In.</u> | mm. | nm. In. mm. |                   | ln.  | mm. | ln.      | mm. | ln.  | mm.                | ln.  | mm. | ln.  | mm.      | ln.  | mm. | ln.  | mm.      | In. ı | nm.  | Lbs.         | Kg.                   | Lbs.  | Kg.         | Ctn. Qty. |
| 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 ½        | 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 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







|     | 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<br>ASTM A449 Grade 5 |
| 8.  | Body End (2)        | Silicon Bronze ASTM B584 Alloy C87850             |
| 9.  | Ball (Vented)       | Stainless Steel ASTM A276 Type 316                |
| 0.  | Body                | Silicon Bronze ASTM B584 Alloy C87850             |
| 11. | O-Ring Seal (2)     | FKM   |
| 2.  | Seat Ring (2)       | PTFE  |
| 13. | Body Nuts           | Zinc Dichromate Plated Steel<br>ASTM A449 Grade 5 |

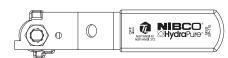




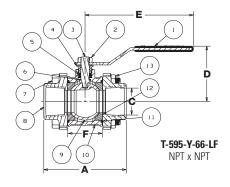
**S-595-Y-66-LF** Solder

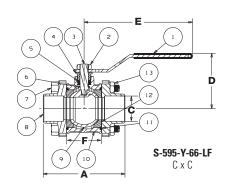
T-595-Y-66-LF

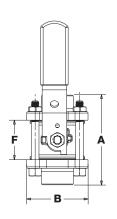
Threaded



**Handle Markings** 







### **DIMENSIONS—WEIGHTS—QUANTITIES**

|       |        | T-595- | Y-66-LF | S-595 | -Y-66-L | F    | Dimensions |      |     |      |     |      |     |            |               |      |         |         |           |
|-------|--------|--------|---------|-------|---------|------|------------|------|-----|------|-----|------|-----|------------|---------------|------|---------|---------|-----------|
| Si    | Size A |        | A       | A     |         | В    |            | С    |     |      | D   |      | E   | F          | T-595-Y-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  | 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  | 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 | 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 | 111.40        | 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 ● Truesdail NSF/ANSI/CAN

61-2018 Commercial Hot 180°F, NSF/ANSI 372

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

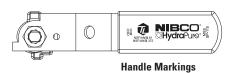
Pressure rating: 250 psi non-shock cold working pressure\*
Maximum pressure / temperature: 225 psi at 250° F\*

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



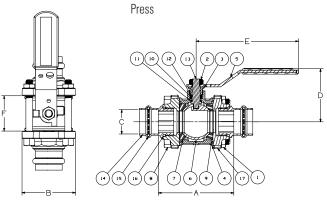
### **MATERIAL LIST**

|     |                       | WAI LINAL LIVI   |
|-----|-----------------------|--|
|     | 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 (1¼"-2½") |
| 8.  | Seats (2)             | PTFE "Y" or RPTFE "R" Glass Reinforced                       |
|     | Dady Dalta            | Zinc Dichromate Plated Steel                                 |
| 9.  | 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<sup>®</sup> Alloy • Three-Piece Body • Press Ends Leak Detection • Stainless Steel Trim • Full Port • Blowout-Proof Stem

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

61-2018 Commercial Hot 180°F, NSF/ANSI 372

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

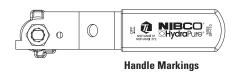






### **MATERIAL LIST**

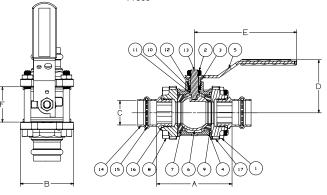
|     |                       | MAI EINAE EIOT                         |
|-----|-----------------------|--|
|     | PART                  | SPECIFICATION                          |
| 1.  | Body Nuts             | Zinc Dichromate Plated Steel           |
|     | Douy Nuts             | ASTM A449 Grade 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         |
| 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           |
| 9.  | Dudy Duits            | ASTM A449 Grade 5                      |
| 10. | O-ring (2)            | FKM                                    |
| 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. | 0-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 |       | 1   |       | 3   | (     | ;   |       | )   |       | Ē   |       | F   | Wei   | ghts | 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        |
| 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<sup>®</sup> Alloy • Screw-In Bonnet • Rising Stem • Conforms to MSS SP-139 • Solid Wedge • Press Ends Leak Detection

**Approvals:** NSF/ANSI-61-8 Commercial Hot 180°F (includes Annex F and G)

and NSF/ANSI-372

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



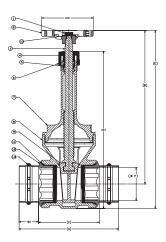




## **MATERIAL LIST**

|     | 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**

| SI             | ZE  |      | Α     |       | 3   |      | <u>C</u> |       | )   |       |     |      | <u> </u> | (    | G     |      | <u>H</u> | We   | ight | Master   |
|----------------|-----|------|-------|-------|-----|------|----------|-------|-----|-------|-----|------|----------|------|-------|------|----------|------|------|----------|
| ln.            | mm. | In.  | mm.   | In.   | mm. | ln.  | mm.      | ln.   | mm. | ln.   | mm. | ln.  | 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       |
| 1-1/4          | 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       |
| 1-1/2          | 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 <sup>‡</sup> | 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        |

<sup>†</sup>No packing gland, packing only in this size.

<sup>\* 200</sup> 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

**Approvals:** Conforms to MSS SP-139 • Solid Wedge • NSF/ANSI-61-8 Commercial Hot

180°F (includes annex F and G) and NSF/ANSI-372

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

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



T-111-LF Threaded



## **DIMENSIONS—WEIGHTS—QUANTITIES**

| SI               | ZE  |      | <u> </u> | E     | 3   | (    | <u>;                                    </u> |       | )   |       | <u> </u> |      | <u> </u> | (    | <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 <sup>†</sup> | 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        |
| SI               | ZE  |      | A        | Е     | 3   | (    | ;  |       | )   |       | E        |      | F        | (    | G        | S-11  | 1-LF | Master   |

| SI    | ZE  |      | 1   | E     | 3   |      | ;   |      | )   |       | <u> </u> |      | F   |      | <u> </u> | S-11 | 1-LF | Master   |
|-------|-----|------|-----|-------|-----|------|-----|------|-----|-------|----------|------|-----|------|----------|------|------|----------|
| In.   | mm. | In.  | mm. | ln.   | mm. | In.  | mm. | ln.  | 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%

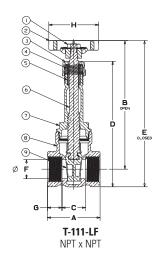


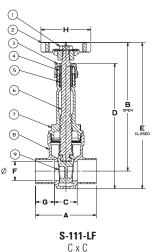






S-111-LF Solder







# **NIBCO®** Press System Lead-Free Bronze Gate Valves

**Features:** Silicon Performance Bronze<sup>®</sup> Alloy ● Screw-In Bonnet ● Non-Rising Stem ● Press Ends Leak Detection

**Approvals:** Conforms to MSS SP-139 • Solid Wedge • NSF/ANSI-61-8 Commercial Hot 180°F (includes Annex F and G) and NSF/ANSI-372

Size range: 1/2" - 3"

Pressure rating: 250<sup>†</sup> 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



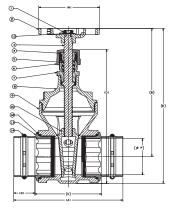




## **MATERIAL LIST**

|     | 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  |      | Α     |       | В     |      | C     |       | D     |       | E     |      | F   | (    | G     |      | H     | Wei   | ight | Master   |
|----------------|-----|------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|-----|------|-------|------|-------|-------|------|----------|
| In.            | mm. | ln.  | mm.   | In.   | mm.   | ln.  | mm.   | In.   | mm.   | In.   | mm.   | ln.  | mm. | ln.  | 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 <sup>‡</sup> | 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

**Approvals:** Conforms to MSS SP-139 • Solid Wedge • NSF/ANSI-61-8 Commercial Hot 180°F (includes annex F and G) and NSF/ANSI-372

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



|     | IVIAI ENIAL LIƏI     |  |  |  |  |  |  |  |  |  |  |  |
|-----|----------------------|--|--|--|--|--|--|--|--|--|--|--|
|     | 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<br>Alloy C84400 or Brass ASTM B16 |  |  |  |  |  |  |  |  |  |  |
| 6.  | Packing Gland        | Bronze ASTM B62 or ASTM B584<br>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  |      | 4   | E    | 3   |      | <u> </u> |      | <u> </u> |      | <u> </u> |      | F   |      | H   | 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.



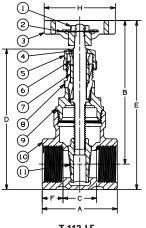




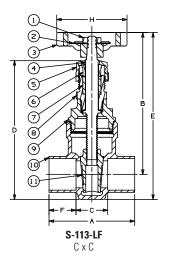




S-113-LF Solder



T-113-LF 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-61-8 Commercial Hot 180°F

(includes annex F and G) and NSF/ANSI-372  $\,$ 

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



|    |                    | IVIAI ENIAL 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<br>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                        |

<sup>\*</sup>Sizes 34", 1", 11/4", 11/2" and 2" only. No Seat Disc Washers on 1/2" and 3/4" with PTFE (Y) discs.







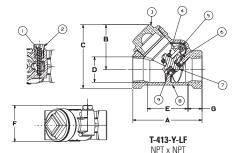


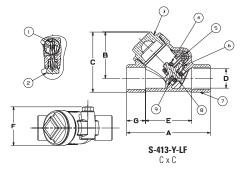


T-413-Y-LF
Threaded



S-413-Y-LF Solder





#### **DIMENSIONS—WEIGHTS—QUANTITIES**

| SI    | SIZE A |      | B     |      | C     |      | D     |      | E   |      | F   |       | G   |      | T-413-Y-LF |       | Master |          |
|-------|--------|------|-------|------|-------|------|-------|------|-----|------|-----|-------|-----|------|------------|-------|--------|----------|
| In.   | mm.    | ln.  | mm.   | In.  | mm.   | In.  | mm.   | In.  | mm. | In.  | mm. | ln.   | mm. | ln.  | 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     |       | В     |       | <u> </u> |      | )   |      | <u> </u> |       | <u> </u> |      | <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.

 $\triangle$ 

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-61-8 Commercial Hot 180°F

(includes annex F and G) and NSF/ANSI-372

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 11                   | LINAL LIOI                            |
|-----|---------------------------|---------------------------------------|
|     | 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                                  |

<sup>\*</sup> 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     | 20      | 2.42 | 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.



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.

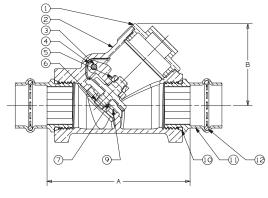








PC-413-Y-LF Press Ends



PC-413-Y-LF Press x Press



# **Lead-Free Bronze Ring Check® Valves**

**Features:** Silicon Performance Bronze<sup>®</sup> Alloy ● Inline Lift Type ● Resilient Discs ● Spring Actuated

**Approvals:** Conforms to MSS SP-139 ● NSF/ANSI-61-8 Commercial Hot 180°F

(includes annex F and G) and NSF/ANSI-372

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  |      | 4   | E    | 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.



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.





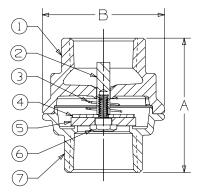




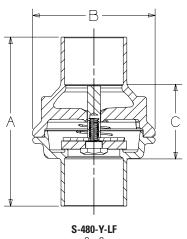


T-480-Y-LF Threaded

S-480-Y-LF Solder



T-480-Y-LF NPT x NPT



CxC

## AHEAD OF THE FLOW



NSF/ANSI 61

NSF/ANSI 372

Dezincification

Resistant

# **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-61-8 Commercial Hot 180°F and NSF/ANSI-372

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





Press Ends

### **MATERIAL LIST**

|     | 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  |       | 4   |       | 3   | (     | <u> </u> | PC-48 | 0-Y-LF | Master   |
|------|-----|-------|-----|-------|-----|-------|----------|-------|--------|----------|
| ln.  | 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  | A     |     |       | 3   |       | ;   | PC-480 | )-W-LF | Master   |
|------|-----|-------|-----|-------|-----|-------|-----|--------|--------|----------|
| In.  | mm. | In.   | mm. | In.   | mm. | In.   | 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       |

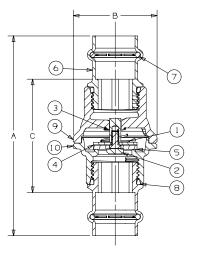
Install 5 Pipe diameters minimum downstream from pump discharge or changes in direction to avoid flow turbulence. Flow straighteners may be required in extreme cases.

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.



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.



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

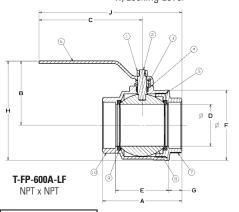
UL, Gas and Oil (1/4" - 4"):

- 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")



## 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—OLIANTITIES

|       |     |      |     |      |     |      | וווע |      |     | 110  | •   | LIU  | 1110 | Q.   | יוחנ |      | ILU |       |     |         |        |          |
|-------|-----|------|-----|------|-----|------|------|------|-----|------|-----|------|------|------|------|------|-----|-------|-----|---------|--------|----------|
| SI    | ZE  |      | 4   | E    | 3   | (    | )    |      | )   |      |     |      | F    | (    | 3    |      | 1   | J     |     | T-FP-60 | 00A-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. |
| 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        |
| 1-1/4 | 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        |
| 1-1/2 | 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        |

 $\triangle$ 

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)

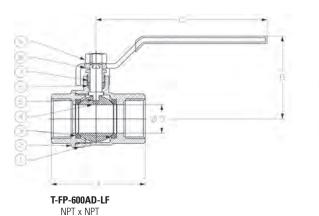
## Not intended for steam or gas usage

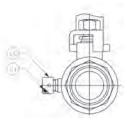
## **MATERIAL LIST**

|     |                    | 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

C

R

NSF/ANSI 61 & 372
IAPMO/ANSI 21157



2 year limited warranty

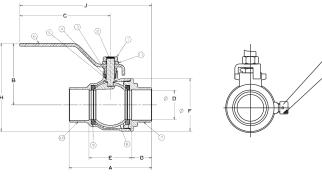
3/8"-2" 600 PSI non-shock cold working pressure, 350 PSI at 200°F max 2-1/2"-3" 400 PSI non-shock cold working pressure, 250 PSI at 200°F max

## 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

|       | DIMENSIONS—WEIGHTS—QUANTITIES |      |     |      |     |      |      |      |     |      |     |      |     |      |     |      |     |       |     |         |        |          |
|-------|-------------------------------|------|-----|------|-----|------|------|------|-----|------|-----|------|-----|------|-----|------|-----|-------|-----|---------|--------|----------|
| 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<sup>†</sup>

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") <sup>‡</sup> |

#### **Options:**

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



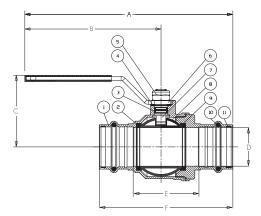
**Handle Markings** 





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   | IZE A |     |      | 3   | 0    | ;   |       | <u> </u> |      | <u> </u> |      | F     | We   | 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<sup>†</sup>

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** 

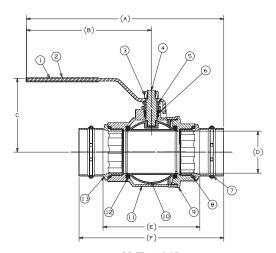








PC-FP-600A-LF Press x Press 2 1/2" - 4"



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

#### **DIMENSIONS—WEIGHTS—QUANTITIES**

| SI  | SIZE |       | Α     | E    | 3     | (    |       |      | D     |      | <u> </u> |       | F      | We    | ight  |
|-----|------|-------|-------|------|-------|------|-------|------|-------|------|----------|-------|--------|-------|-------|
| 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<sup>†</sup>

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





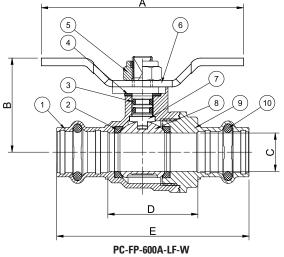






PC-FP-600A-LF-W

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

 $\wedge$ 

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<sup>†</sup>

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** 

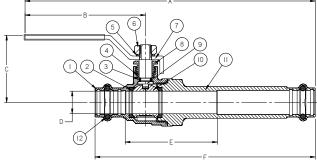
C (R)
NSF/ANSI 61 & 37Z
IAPMO/ANSI Z1157







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 |       | B    | <u> </u> | 0    | ;    |      | <u> </u> | E    | <u> </u> |      | F     | We   | ight |
|---|------|--------|-------|------|----------|------|------|------|----------|------|----------|------|-------|------|------|
|   | 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<sup>†</sup>

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.  | 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 (1¼"-1½")          |
| 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:

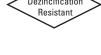
- Extended lever
- **EPDM Seal for Press Ends**
- Wing Handle



**Handle Markings** 

## Dezincification Resistant NSF/ANSI 61 & 372 IAPMO/ANSI Z1157

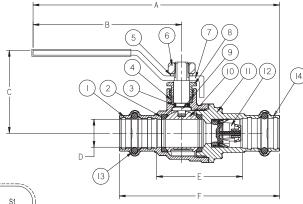






## PC-FP-485-LF

Press x Press 1/2" - 11/2"



PC-FP-485-LF Press x Press 1/2" - 11/5"

#### DIMENSIONS—WEIGHTS—QUANTITIES

| SIZE  | SIZE A In. mm. |        | A B     |        | С       |       |       | D     |         | E      |      | F      | Weight |      |  |
|-------|----------------|--------|---------|--------|---------|-------|-------|-------|---------|--------|------|--------|--------|------|--|
| In.   |                |        | In. mm. |        | In. mm. |       | ln.   | mm.   | In. 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 °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
- 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.

6. Hydraulic Shock (Water Hammer) Test

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<sup>†</sup>

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





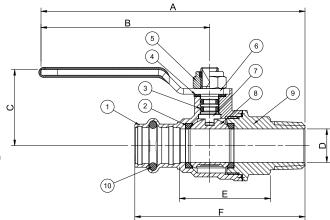






## PCMT-FP-600A-LF

Press x MIP 1/2" - 1"



PCMT-FP-600A-LF

Press x Male 1/2" - 1"

### **DIMENSIONS—WEIGHTS—QUANTITIES**

| SIZE |       | Α    |        | В    |        | (    | ;     |      | D     |      | <b>.</b> | 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

 $\triangle$ 

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<sup>†</sup>

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-ring   | EPDM - ASTM D2000                |

#### Options:

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



**Handle Markings** 



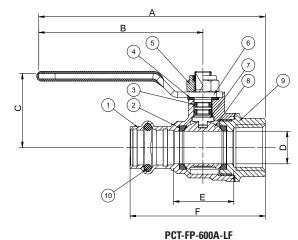






PCT-FP-600A-LF

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 |       | A    |        |      | <u>B</u> <u>C</u> <u>D</u> <u>E</u> <u>F</u> |      | F     | Weight |       |      |       |      |       |        |        |
|------|-------|------|--------|------|--|------|-------|--------|-------|------|-------|------|-------|--------|--------|
| In.  | mm.   | In.  | mm.    | In.  | mm.  | ln.  | mm.   | ln.    | 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

 $\bigwedge$ 

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<sup>†</sup>

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

|              | MIAI 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

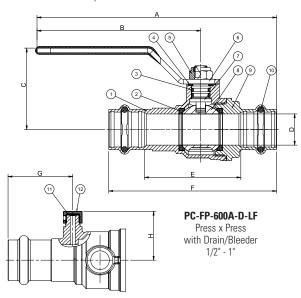






## PC-FP-600A-D-LF

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



#### **DIMENSIONS—WEIGHTS—QUANTITIES**

|      | SIZE  |      | Α      |      | В      |      | C     |      | D     |      | E     |      | F      | G    |       | H    |       | Weight |        |
|------|-------|------|--------|------|--------|------|-------|------|-------|------|-------|------|--------|------|-------|------|-------|--------|--------|
| In.  | mm.   | ln.  | mm.    | ln.  | 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

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 • 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<sup>†</sup>

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



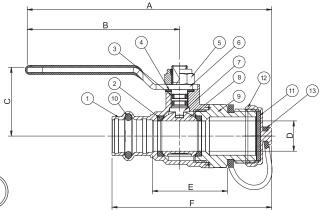
**Handle Markings** 





## 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) 7. Vibration Test

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

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 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<sup>†</sup>

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") <sup>††</sup>                |

#### **Options:**

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

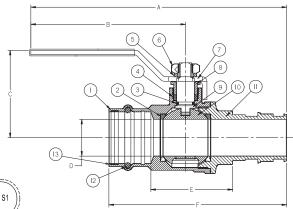


Handle Markings

# 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" <sup>††</sup>

#### **DIMENSIONS—WEIGHTS—QUANTITIES**

| SIZE   | SIZE A In. mm. |        | I    | В      | (       | 3     | I    | D     | ı    | E     |      | F      | We     | ight   |
|--------|----------------|--------|------|--------|---------|-------|------|-------|------|-------|------|--------|--------|--------|
| ln.    |                |        | ln.  | mm.    | In. 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 °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
- 7. Vibration Test 8. Thermal Cycling Test
- 9. Alternate Thermal Cycling Test
- est 10. Dynamic Torsion Test for Press Connections

 $\bigwedge$ 

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.

6. Hydraulic Shock (Water Hammer) Test



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<sup>†</sup>

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") <sup>††</sup>       |

#### 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     |      | <b>:</b> |      | 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 10. Dynamic Torsion Test for Press Connections

- 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 ● 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<sup>†</sup>

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**

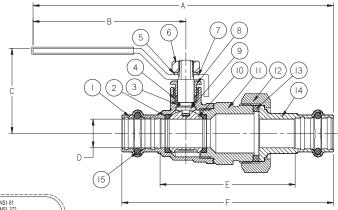
|     | PART          | SPECIFICATION                    |
|-----|---------------|----------------------------------|
| 1.  | Body          | Forged DZR Copper Alloy - C46500 |
| 2.  | Seat Seal (2) | PTFE                             |
| 3.  | 0-ring        | EPDM - ASTM D2000                |
| 4.  | 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 |       |      | Α      | B    | <u> </u> | C    | ;     |      | <u> </u> |      | <u> </u> |      | <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 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 °C (68°F)
- 4. Bending Test

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

 $\triangle$ 

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<sup>†</sup>

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** 



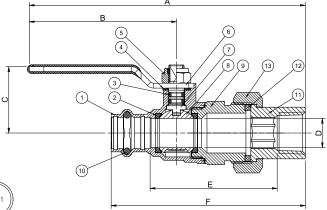






## PCFU-FP-600A-LF

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

| S    | SIZE  |      | Α             | В    |        | C    |       | D    |       |      | E     |      | F      | Weight |        |  |
|------|-------|------|---------------|------|--------|------|-------|------|-------|------|-------|------|--------|--------|--------|--|
| In.  | mm.   | In.  | ln. mm. In. n |      | 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
- 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

 $\wedge$ 

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<sup>†</sup>

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** 



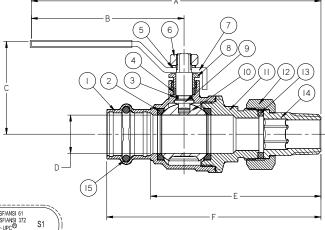






## PCMU-FP-600A-LF

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    |       |      |       |      | F      | Weight |        |
|----------------|-------|------|--------|------|--------|------|-------|------|-------|------|-------|------|--------|--------|--------|
| In.            | mm.   | ln.  | mm.    | In.  | mm.    | ln.  | mm.   | In.  | mm.   | ln.  | 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<sup>†</sup>

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



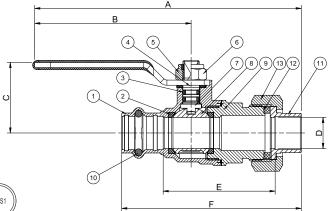
**Handle Markings** 





## 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**

| S    | SIZE  |                     | Α      | В    |        | C       |       | D    |       |      | <u> </u> |      | F      | Weight |        |
|------|-------|---------------------|--------|------|--------|---------|-------|------|-------|------|----------|------|--------|--------|--------|
| In.  | mm.   | 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 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

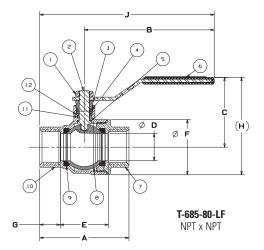
Lead-free markings: Double oval in body casting, white handle and blue hang tag

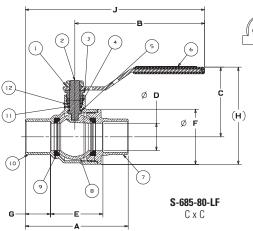
## **MATERIAL LIST**

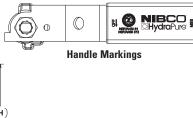
|                       | MAILIMELIUI                           |
|-----------------------|---------------------------------------|
| PART                  | SPECIFICATION                         |
| 1. Handle             | Steel, Plated                         |
| 2. Nut, Handle        | Steel, Plated                         |
| 3. Pack Gland         | Brass ASTM B 16 Alloy C36000          |
| 4. Packing, Stem      | Virgin PTFE                           |
| 5. Washer, Flat       | 430 Stainless                         |
| 6. O-Ring (Stem Seal) | EPDM                                  |
| 7. Washer, Thrust     | Reinforced PTFE                       |
| 8. Stem               | Silicon Bronze ASTM B371 Alloy C69300 |
| 9. Body               | Silicon Bronze ASTM B283 Alloy C69300 |
| 10. Seat Ring         | Virgin PTFE                           |
| 11. Ball              | Silicon Bronze ASTM B283 Alloy C69300 |
| 12. End Piece         | Silicon Bronze ASTM B283 Alloy C69300 |
|                       |                                       |



**S-685-80-LF** Solder







## **DIMENSIONS—WEIGHTS—QUANTITIES**

|       |     |      | Dillicitoroit |      |     |      |     |      |     |      |     | 911  |     | ~    | ,,,,,, | • • • • • |     |       |        |       |        |          |
|-------|-----|------|---------------|------|-----|------|-----|------|-----|------|-----|------|-----|------|--------|-----------|-----|-------|--------|-------|--------|----------|
| SI    | ZE  |      | 4             |      | 3   |      | ;   |      | )   |      |     |      |     |      | 3      |           | J   | T-685 | -80-LF | S-685 | -80-LF | Master   |
| ln.   | mm. | In.  | mm.           | ln.  | mm. | ln.  | mm. | ln.  | mm. | In.  | 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 61/372-8 Commercial Hot 180°F







Size range: 1/4" - 2"

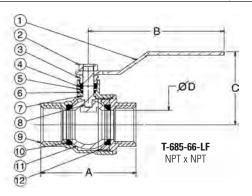
Pressure rating: 600 PSI non-shock cold working pressure Maximum pressure / temperature: 100 PSI at 300° F

Lead-free markings:

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

### **MATERIAL LIST**

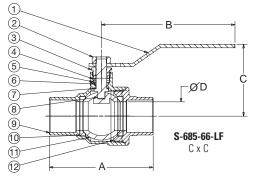
|     | PART               | SPECIFICATION  |
|-----|--------------------|--|
| 1.  | Handle             | Steel, Plated  |
| 2.  | Nut, Handle        | Steel, Plated  |
| 3.  | Pack Gland         | Brass ASTM B16 Alloy C36000                                  |
| 4.  | Packing, Stem      | Virgin PTFE  |
| 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<br>or ASTM A351 Type CF8M |
| 12. | End Piece          | Silicon Bronze ASTM B283 Alloy C69300                        |





**S-685-66-LF** Solder





#### DIMENSIONS—WEIGHTS—QUANTITIES

|       |     |       |        |       |        |      |     |      |     |      |     |       |        |       |        |      | <del></del> |       | <del></del> |       |        |       |        |       |          |       |        |       |        |           |
|-------|-----|-------|--------|-------|--------|------|-----|------|-----|------|-----|-------|--------|-------|--------|------|-------------|-------|-------------|-------|--------|-------|--------|-------|----------|-------|--------|-------|--------|-----------|
|       |     |       |        |       |        |      |     |      |     |      |     | 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  |       | ۸      |       | 4      |      | B   |      | ;   |      | D   |       | E      |       | E      |      | F           |       | G           |       | 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         |

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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 Bronze Ball Valves**

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

Blowout-Proof Stem

**Approvals:** MSS SP-110/145 • NSF/ANSI 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**

|     |                   | WIN TO ELLIN TE ELLO I                |
|-----|-------------------|---------------------------------------|
|     | 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 |  |  |  |  |  |  |  |  |







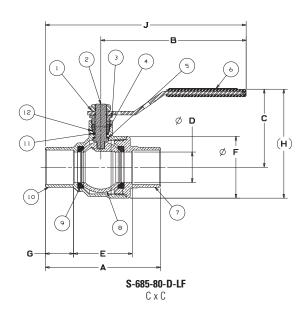


S-685-80-D-LF

Solder







## **DIMENSIONS—WEIGHTS**

| NOM | SIZE |      | 4   | E    | 3   | 0    | ;   |      | )   |      | <u> </u> | F    | <u> </u> | G    | <u> </u> |      | 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 61-8 (includes annex F and G) and NSF/ANSI 372

Pressure rating: 125 PSI non-shock cold working pressure

Maximum pressure / temperature: 125 PSI at 180° F

Lead-free markings:

Double oval in body casting and white handle



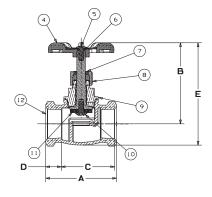




**76-LF** FIP x FIP

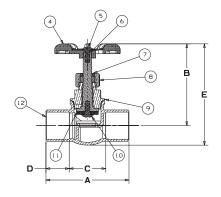


| PART            | SPECIFICATION                        |
|-----------------|--------------------------------------|
| Body            | ASTM B584 Alloy C87850               |
| Bonnet          | ASTM B584 Alloy C87850               |
| Stem            | Cold-formed Copper Alloy             |
| Seat Disc       | EPDM                                 |
| Seat Disc Screw | Stainless Steel, Type 410            |
| Packing Nut     | Free Cutting Brass - ASTM B16        |
| Packing         | Graphite Impregnated, Asbestos-Free  |
| Handwheel       | Epoxy Coated Zinc Alloy              |
| Handwheel Screw | Carbon Steel - Clear Chromate Finish |



**76-LF** 

| DESCRIPTION               | NOM.<br>SIZE | DIMENS<br>A         | SIONS<br>B          | APPROX.<br>NET WT. |  |  |
|---------------------------|--------------|---------------------|---------------------|--------------------|--|--|
| Stop & Waste              | 1/2"         | 2 <sup>3</sup> /16" | 2 <sup>9</sup> /16" | .54 lb             |  |  |
| <b>Valve</b><br>FIP x FIP | 3/4"         | 2 <sup>5</sup> /16" | 29/16"              | .60 lb             |  |  |



726-LF

| DESCRIPTION               | *NOM. | DIMENS              | APPROX.             |         |
|---------------------------|-------|---------------------|---------------------|---------|
| DESCRIPTION               | SIZE  | В                   | С                   | NET WT. |
| Stop & Waste              | 1/2"  | 2 <sup>9</sup> /16" | 1 <sup>3</sup> /16" | .42 lb  |
| <b>Valve</b><br>Cup x Cup | 3/4"  | 2 <sup>9</sup> /16" | 1 <sup>3</sup> /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.



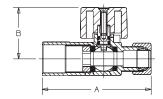
**Pressure Rating: 125 PSI Non-Shock Cold Working Pressure** 





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.

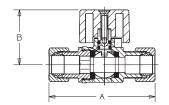




### 7120-LF 🔨

| DECORPTION           | lulus Ouslus   | DIMEN | ISIONS | APPROX. |
|----------------------|----------------|-------|--------|---------|
| DESCRIPTION          | Inlet 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 |



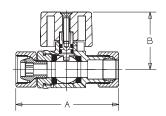


#### 7140-LF 🗘

| DESCRIPTION               | Inlet x Outlet  | DIMEN | ISIONS | APPROX. |
|---------------------------|-----------------|-------|--------|---------|
| DESCRIPTION               | illet 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 |
| STRAIGHT PATTERN          | 5/8 OD x 1/4 OD | 2.28" | 1.15"  | .205 lb |
| Compression x Compression | 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 |



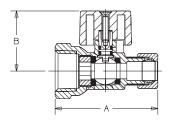




#### 7140F-LF 🗘

| DECCRIPTION                                | II4 O4I4         | DIMEN | ISIONS | APPROX. |  |  |
|--|------------------|-------|--------|---------|--|--|
| DESCRIPTION                                | Inlet x Outlet   | 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 🔨

| DECEDIDATION                       | Index On sleet | DIMENSIONS |       | APPROX. |
|------------------------------------|----------------|------------|-------|---------|
| DESCRIPTION Inlet x Outlet         | iniet 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 |

 $\wedge$ 

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.

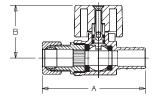
**Pressure Rating: 125 PSI Non-Shock Cold Working Pressure** 





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.

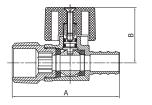




7160-LF 🗘

| DECORIDATION      | l-1-4 O41-4    | 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 |

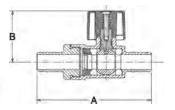




7160M-LF 🗘

| DECODIDATION               | 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 🗘

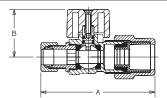
| DECORIDATION               | Inlet x Outlet | DIMENSIONS |       | APPROX. |
|----------------------------|----------------|------------|-------|---------|
| DESCRIPTION                |                | Α          | В     | NET WT. |
| STRAIGHT PATTERN PEX x PEX | 1/2 x 1/2      | 2.26"      | 1.15" | .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 **HANDLE** ABS - CHROME PLATED SCREW STAINLESS STEEL

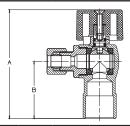




#### 7170-LF 🧥

| DECORIDATION                        | l-1-4 041-4    | DIMEN | ISIONS | APPROX.<br>NET WT. |
|-------------------------------------|----------------|-------|--------|--------------------|
| DESCRIPTION                         | Inlet x Outlet | Α     | В      |                    |
| STRAIGHT PATTERN CPVC x Compression | 1/2 x 3/8 OD   | 2.80" | 1.17"  | .262 lb            |



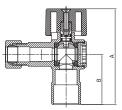


7125-LF 🧘

| DESCRIPTION                           | Inlet x Outlet | DIMENSIONS |       | APPROX. |  |
|---------------------------------------|----------------|------------|-------|---------|--|
|                                       |                | Α          | В     | NET WT. |  |
| ANGLE PATTERN<br>Solder x Compression | 1/2 x 1/2 OD   | 2.46"      | 1.29" | .220 lb |  |
|                                       | 1/2 x 3/8 OD   | 2.46"      | 1.29" | .185 lb |  |
|                                       | 1/2 x 1/4 OD   | 2.46"      | 1.29" | .182 lb |  |



Solder x Comp x Comp



| / ILOUR EI AL                |                       |       |        |         |  |
|------------------------------|-----------------------|-------|--------|---------|--|
| DESCRIPTION                  | luluk 04luk           | DIMEN | ISIONS | APPROX. |  |
|                              | Inlet x Outlet        | Α     | В      | NET WT. |  |
| DUAL OUTLET<br>ANGLE PATTERN | 1/2 x 3/8 OD x 3/8 OD | 2.44" | 1.28"  | .237 lb |  |



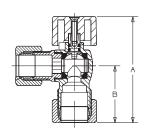
**Pressure Rating: 125 PSI Non-Shock Cold Working Pressure** 





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.

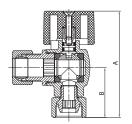




| 7145 | -LF |  |
|------|-----|--|
|------|-----|--|

|   | Inlet x Outlet  | DIMENSIONS |       | APPROX. |  |
|---|-----------------|------------|-------|---------|--|
| DESCRIPTION                             |                 | 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 |  |



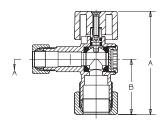


### 7145F-LF 🗘

| DESCRIPTION                             | Indaése Outlat   | DIMENSIONS |       | 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 |  |

| 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                          |  |  |
| O-RING          | EPDM                           |  |  |
| HANDLE          | ABS – CHROME PLATED            |  |  |
| SCREW           | STAINLESS STEEL                |  |  |

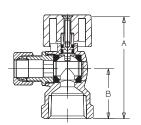




## 7145DX-LF 🗘

| DECORPORATION                    |                          | DIMEN | ISIONS | 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 <u>^</u>

| DESCRIPTION                        | Inlet x Outlet | DIMENSIONS |       | APPROX. |
|------------------------------------|----------------|------------|-------|---------|
|                                    |                | Α          | В     | NET WT. |
| ANGLE PATTERN<br>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.

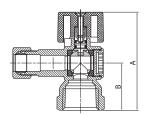
**Pressure Rating: 125 PSI Non-Shock Cold Working Pressure** 





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.

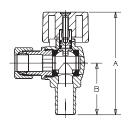




### 7155DX-LF 🗘

| DESCRIPTION                                       | Inlet x Outlet        | DIMENSIONS |       | APPROX. |
|---|-----------------------|------------|-------|---------|
|   |                       | Α          | В     | NET WT. |
| DUAL OUTLET<br>ANGLE PATTERN<br>FIP x Comp x Comp | 1/2 x 3/8 OD x 3/8 OD | 2.25"      | 1.08" | .260 lb |
|   | 1/2 x 3/8 OD x 1/4 OD | 2.25"      | 1.08" | .263 lb |



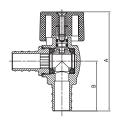


## 7165-LF 🗘

| DESCRIPTION                     | Inlet x Outlet | DIMENSIONS |       | APPROX. |
|---------------------------------|----------------|------------|-------|---------|
|                                 |                | 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 |



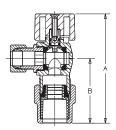




#### 7165PEX-LF 🗘

| DESCRIPTION             | Inlet x Outlet | DIMENSIONS |       | APPROX. |
|-------------------------|----------------|------------|-------|---------|
|                         |                | Α          | В     | NET WT. |
| ANGLE PATTERN PEX x PEX | 1/2 x 1/2      | 2.35"      | 1.18" | .148 lb |

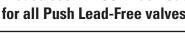




#### 7175-LF 🗘

| DESCRIPTION                      | Inlet x Outlet | DIMENSIONS |       | APPROX. |
|----------------------------------|----------------|------------|-------|---------|
|                                  |                | 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

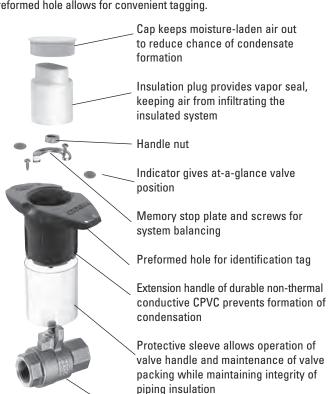
NIBCO bronze ball valves installed with NIB-SEAL insulated handles are the best approach that keeps your insulated piping system completely intact.

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).

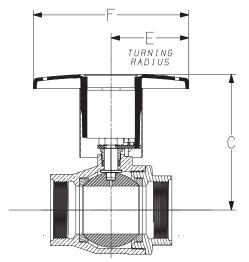
- Protective sleeve provides a stationary surface to affix the insulation, allowing operation of the valve without destroying the integrity of the insulated system.
- · High-strength CPVC cylindrical handle design features easy access to standard adjustable memory stop for system balancing.
- Cap and 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 |             |      |              |       |      |  |  |  |  |
|--------|------------|-------------|------|--------------|-------|------|--|--|--|--|
|        | Va         | 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.\*\*

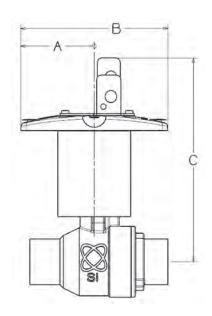
**Applications:** For piping systems requiring up to 2" of insulation, specify a non-conductive CPVC extended-locking handle bronze ball valve tested to UL 2043, and UL listed for installation in air handling spaces. The assembly offers a vapor seal, position indicators, locking device, and actuation 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.

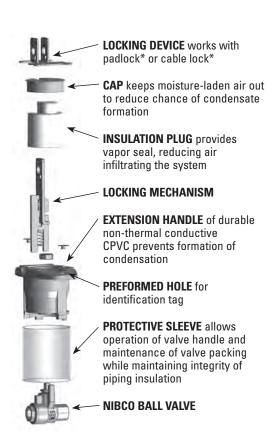
Approvals: UL 2043

**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 |  |  |  |  |  |

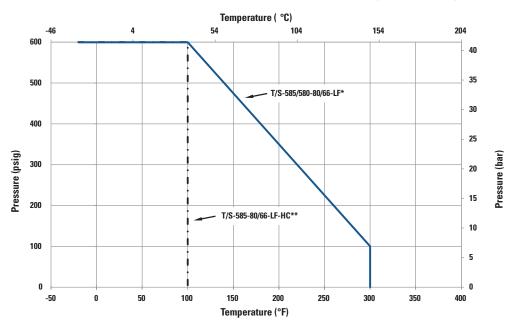
Factory installed only.

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.

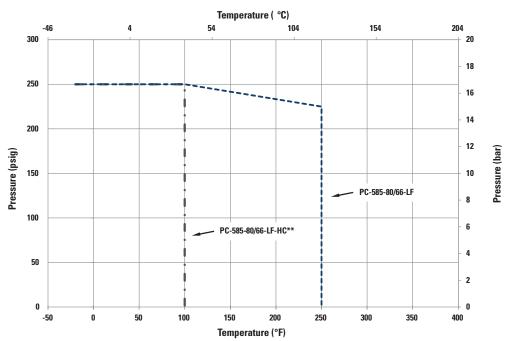
## **Pressure Temperature Ratings - T/S/PC-585/580-LF**

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



<sup>\*</sup> 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")

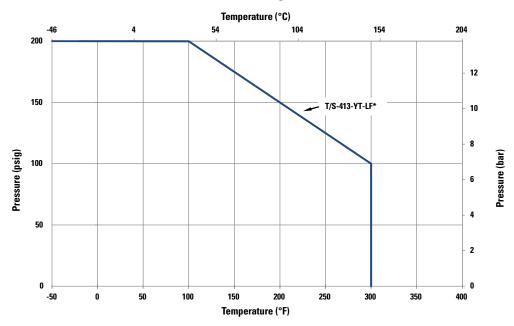


<sup>\*\*</sup> Ball valves with hose thread end connections shall have a maximum service temperature ≤100°F.

<sup>\*\*</sup> Ball valves with hose thread end connections shall have a maximum service temperature 100°F.

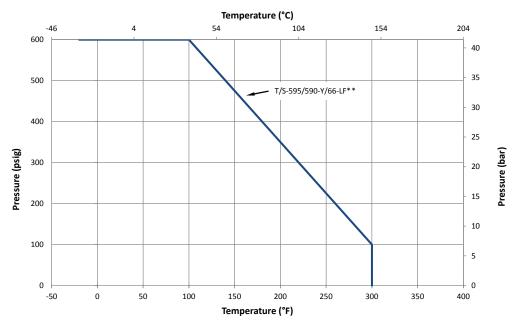
## **Pressure Temperature Ratings - T/S-413-Y-LF**

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



<sup>\*</sup> 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")



<sup>\*\*</sup> 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 3<sup>rd</sup> 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 3<sup>rd</sup> 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  | ominal % - Maximum Trace % Strength |        |      |      |       |       | th (PSI)†        | %      |        |        |
| <u> </u>          | 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     |
| B.                | 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     |                 |       |         |                      |      |     |      |                                     |        |      |      |       |       |                  |        |        |        |
|                   | Commercial      | B 140 | C 31400 | 89.0                 | 1.9  | -   | 9.1  | -                                   | -      | 0.1  | 0.7  | -     | -     | -                | 52,000 | 45,000 | 18     |
| Bronze            | 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     |
| 5                 | 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     |
| Δ -               | 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 | Ì -   | 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     |
| Brass             | 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     |
|                   | 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     |
| Lead-Free         | 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     |
| <u>투</u>          | 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     |
| eac               | 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     |
| Ĭ.                | 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     |
| ė.                | 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      |
| Ę.                | 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    |      |      | •     |       |                  |        |        |        |
| Cu                | 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.

 $<sup>^{\</sup>dagger}$  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        |  |
|--------------------------|------------------------------------|--------------|------------------|-------------------|--------------|--|
| o o                      | Two-Pc. Bronze Full Port           | S/T-585-LF   | UPBA400/450      | 77CLF-100/200     | LFB6080/6081 |  |
| Bronze<br>Ball           | Two-Pc. Bronze Conventional Port   | S/T-580-LF   | UPBA100/150      | 70LF-100/200      | LFB6000/6001 |  |
| Δ.                       | Three-Pc. Bronze Full Port         | S/T-595-Y-LF | UPBA300/350      | 82LF-100/200      | _            |  |
| B ^                      | Rising Stem Gate                   | S/T-111-LF   | UP149/148        | 101S-LF/101T-LF   | _            |  |
| e Gat                    | Non-Rising Stem Gate               | S/T-113-LF   | UP105/115        | 102S-LF/102T-LF   | LFGVS/LFGV   |  |
| Bronze Gate<br>and Check | Swing Check                        | S/T-413Y-LF  | UP1509/509       | 163S-LF/163T-LF   | LFCVS/LFCV   |  |
| <u> </u>                 | Inline Check                       | S/T-480Y-LF  | UP1548T/548T     | 61-LF             | LF601S/60    |  |
|                          | OS&Y Gate                          | F637-33      | _                | _                 | _            |  |
|                          | OS&Y Gate RW                       | F607RW       | _                | _                 | _            |  |
| Iron Gate and Check      | Non-Rising Stem Gate RW            | F619RW       | _                | _                 | _            |  |
| l g                      | 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       |  |
| Ba                       | Ductile Iron Single Flange Grooved | GD4765N      | _                | _                 | _            |  |

| PLUMBIN               | G VALVES                         | NIBCO      | Milwaukee     | Apollo (Conbraco) | Watts    |
|-----------------------|----------------------------------|------------|---------------|-------------------|----------|
| ass /<br>onze<br>3all | Two-Pc. Brass / Bronze Full Port | S/T-685-LF | UPBA475B/485B | 77FLF-100/200     | LFFBV-3C |
| Bron<br>Bron<br>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     | _          |
|                      | 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<br>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 |
| 4/4                  | 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.

<sup>\*\*</sup> 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<sup>®</sup>, this silicon-based Performance Bronze<sup>®</sup> 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<sup>®</sup> are registered trademarks of the Lubrizol Corporation Kynar<sup>®</sup> 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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