# NIBCO ®



# Press Fittings and Valves Catalog

C-NPS-0524

# NIBCO



#### **QUALITY PRODUCTS SINCE 1904**

A recognized brand leader bringing flow control products and technologies to market, NIBCO has a history of success and innovation in the plumbing industry.

Headquartered in Elkhart, Indiana, we operate multiple manufacturing plants and distribution centers strategically located throughout the United States and globally, and offer more than 36,000 SKUs, including our NIBCO® family brands, Webstone®, Chemtrol® and Sure Seal®.

We have vertically integrated manufacturing, distribution and networked communications to provide a seamless source of information and service, 24/7. We place great emphasis on personal connections with our factory direct sales, live customer service and technical service support. We also offer unique programs to support our customers' success, including our NIBCO Partner program, Vendor Managed Inventory and EDI for wholesalers.

More than 90 percent of NIBCO-branded products are manufactured in the U.S. using high-quality materials and innovative processes and technologies to improve product performance and quality. For every high-quality valve or fitting made at NIBCO, each is made with pride by the hundreds of NIBCO associates who work there.

Today, NIBCO is a fifth-generation, family- and associateowned business. Since 1904, we've pioneered many products and processes. As the flow control industry continues to become more demanding, we remain focused on what has made us successful: delivering more than a product and making business better for each of our customers.





**VISIT OUR WEBSITE TO LEARN MORE** 



# **NIBCO**<sup>®</sup> **Press System Table of Contents**



	Page		Page
Contents		PCFU-FP-600A-LF Lead-Free Ball Valve	
Fittings		PCMU-FP-600A-LF Lead-Free Ball Valve	
Applications Chart	4	PCSU-FP-600A-LF Lead-Free Ball Valve	
Adapters	5	PCU-FP-600A-LF Lead-Free Ball Valve	
Caps	5	PC-FP-600A-S-LF Lead-Free Slip Valve	
Couplings		PC-FP-485-LF Lead-Free Ball and Check Valve	
Elbows	6-8	PF-111 Gate Valve	
Fitting Reducers	8	PC-111-LF Gate Valve	50
Flanges	9	PF-113 Gate Valve	51
Tees	10	PC-113-LF Gate Valve	
Unions	10	PF-211-Y Globe Valve	53
Accessories	10	PF-311-Y Angle Valve	54
Valves	. 11-65	PC-413-Y-LF Lead-Free Check Valve	55
Illustrated Index	. 12-13	PC-480-Y/W-LF	56
PC-585HP-LF	14	PF-413-Y Check Valve	57
PC-585HP-66-LF	15	PF-480-Y In-line Lift Check Valve	58
TPC-585HP-LF	16	PFD-2000 Butterfly Valve	59
PC-585HP-LF-HC	17	PS-585-70 Ball Valve	60
PC-585-70 Ball Valve	18	PS-585-70-66 Ball Valve	61
PC-585-70-66 Ball Valve	19	PS-585-70-HC Ball Valve-Hose Connection w/Cap & Ch	ain62
TPC-585-70 Ball Valve	20	PF-221/222-A/B Bronze Y-Strainer	63
TPC-585-70-66 Valve	21	Handle Options and Accessories	64
PC-585-70-HC Ball Valve-Hose Connection w/Cap & Ch	ain .22	NIB-SEAL® Technical Data	65
PC-585-70-66-HC Ball Valve-Hose Connection w/Cap & Ch	nain23	NIB-SEAL® Locking Extended Handle Technical Data	66
PC-585-80-LF Lead-Free Ball Valve	24	Butterfly Valve Options and Accessories	67
PC-585-66-LF Lead-Free Ball Valve	25	Butterfly Valve Technical Information	68
PC-585-80-LF-HC Lead-Free Ball Valve	26	Tools and Jaws	69-73
PC-585-66-LF-HC Lead-Free Ball Valve	27	Standard Pressing Tool - PC-280 32kN	70
TPC-585-80-LF Ball Valve	28	Mini Pressing Tool - PC-20M 15kN	71
TPC-585-66-LF Ball Valve	29	PC-10M and PC-100 Accessories	72
PC-585-80-LF-SR Ball Valve w/Spring Return Handle	30	Approved Tool and Jaw Compatibility Matrix	73
PC-585-80-LF-HC-SR Ball Valve w/Hose end and		Engineering Data	74-77
w/Spring Return Handle	31	Copper and Copper Alloy Fittings	75
PC-595-Y/R-LF Ball Valve	32	Sample Specification - Fittings	76
PC-595-Y/R-66-LF Ball Valve	33	Sample Specification - Valves	
PC-FP-600A-LF Lead-Free Ball Valve	34-35	Installation Instructions	78-85
PC-FP-600A-LF-W Lead-Free Ball Valve		1/2" - 2" Fittings and Valves	
PCMT-FP-600A-LF Lead-Free Ball Valve	37	2 <sup>1</sup> / <sub>2</sub> " - 4" Fitting and Valves	
PCT-FP-600A-LF Lead-Free Ball Valve		Testing Instructions for Leak Detection	
PC-FP-600A-D-LF Lead-Free Ball Valve		Miscellaneous Technical Information	
PC-FP-600A-LF-HC Lead-Free Ball Valve		Frequently Asked Questions	
PCPXA-FP-600A-LF Lead-Free Ball Valve		Press System Warranty	
PCPX-FP-600A-LF Lead-Free Ball Valve	42	•	



#### **Quick and Easy**

NIBCO Press System is user friendly, quick and easy to install. Installation can be completed in less time than traditional solder, threaded, brazed or grooved copper systems. Significant time savings means tight budgets and deadlines are met while project delays and cost overruns are avoided.

#### **Full System Product Offering**

NIBCO Press System is more than just 1/2" to 4" fittings. Our offering also includes the industry's widest and most specified range of ball, gate, globe, angle, check and butterfly valves in addition to a full line of NIBCO tools necessary to complete a total system installation.

#### **Flameless**

NIBCO Press System is easier and safer to use because there is no flame, solder or flux required. Connections can even be made on a wet tube!

#### Reliable

With the NIBCO Press System, a watertight joint is formed between the EPDM seal and the crimped fitting or valve providing a permanent connection. Reliability you can count on ... NIBCO press fittings are backed by a 5th generation and a 50-year written guarantee.

#### **Approvals, Standards and Performance**

NIBCO Press System has undergone extensive and rigorous internal and external testing and meets various worldwide, industry and governmental standards and codes. Compliant with the following except where otherwise noted: ASME B16.51 Performance • International Residential Code<sup>®</sup> (IRC) • International Plumbing Code<sup>®</sup> (IPC) • International Mechanical Code<sup>®</sup> (IMC) • Uniform Plumbing Code\* (UPC) • Uniform Mechanical Code\* (UMC) • State of Massachusetts (Plumbing).

\*Uniform Plumbing Code and Uniform Mechanical Code are copyrighted publications of the International Association of Plumbing and Mechanical Officials.

Third-party certified to: IAPMO/ANSI/CAN Z1117, Press Fittings; ICC-ES LC1002, Press-Connection Fittings for Potable Water Tube and Radiant Heating Systems; ASME B16.51, Copper and Copper Alloy Press-Connect Pressure Fittings; NSF/ANSI/CAN 61, Drinking Water System Components—Health Effects; NSF/ANSI/CAN 372, Drinking Water System Components—Lead Content.

All valves and fittings are manufactured under a Quality Management System conforming to the current version of ISO 9001 standards.

#### **Applications**

NIBCO Press System can be used in new construction or repair work and is designed for potable water, HVAC and process water systems for commercial, industrial and residential applications.

#### **Professional Appearance**

NIBCO Press System creates a clean joint without the mess of excess solder or discoloration.

#### **Joint Integrity**

NIBCO Press System uses engineered tools, jaws and chains that are tested and approved to ensure a consistent, reliable crimp.



# NIBCO pressystem Fittings





# **Press Fitting Applications Chart**

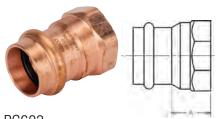
Types of Service	Comments	Pressure	Temperature	Compatible with EPDM Seal
Fluids/Water				
Hot and Cold Potable Water		200 psi	32°F to 250°F	•
Rainwater/Gray Water	Subject to local codes/authority having jurisdiction with appropriate precautions to prevent systems from freezing Propylene Glycol	200 psi	-20°F to 250°F	•
Chilled Water	LL to FOOV File Loss Classification	200 psi	-20°F to 250°F	•
Hydronic Heating	Up to 50% Ethylene Glycol/Propylene Glycol solution appropriate for the	200 psi	-20°F to 250°F	•
Cooling Water	application temperature range	200 psi	-20°F to 250°F	•
Ethanol		200 psi	-20°F to 250°F	•

Gasses				
Compressed Air	Less than 25mg/m <sup>3</sup> Oil Content	200 psi	Up to 140°F	•
Oxygen - O <sub>2</sub> (non-medical)	Keep Oil and Fat Free/Non-Liquid O <sub>2</sub>	140 psi	Up to 140°F	•
Nitrogen - N <sub>2</sub>		200 psi	Up to 140°F	•
Argon	Welding Use	200 psi	Ambient	•
Hydrogen - H <sub>2</sub>		125 psi	Up to 250°F	•
Vacuum		Max 29.2 in. of Mercury-Hg	Up to 140°F	•
Carbon Dioxide - CO <sub>2</sub>	Dry	200 psi	Up to 140°F	•
Low Pressure Steam		15 psi	Up to 250°F	•

 $Consult \ the \ latest \ edition \ of \ the \ NIBCO \ Chem-Guide \ for \ general \ chemical \ compatibility \ reference.$ 

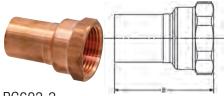


#### **ADAPTERS**



PC603 Adapter P x F – Wrot

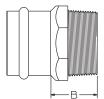
NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
1/2	.103	<sup>13</sup> /16
1/2 x 3/8	.081	21/32
1/2 x 3/4	.151	31/32
3/4	.158	<sup>27</sup> / <sub>32</sub>
3/4 x 1/2	.153	<sup>25</sup> / <sub>32</sub>
1	.237	<sup>15</sup> /16
1 x 1/2	.172	3/4
1 x 3/4	.217	<sup>13</sup> / <sub>16</sub>
1 x 1¼	.436	1 <sup>3</sup> / <sub>16</sub>
11⁄4	.372	11/16
1¼ x 1	.359	11/16
1¼ x 1½	.425	1 <sup>7</sup> /32
1½	.518	11/16
1¼ x 2	.276	1
1½ x 1¼	.515	1
2	.672	1
2½	1.222	113/32
3	1.756	1 <sup>23</sup> / <sub>32</sub>
4	3.238	17/8



PC603-2
Extended Adapter FTG x F – Wrot

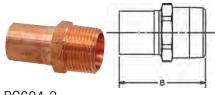
NOM. SIZE	APPROX. NET WT./LBS.	DIM. B INCHES
1/2 x 3/8	0.064	1 <sup>17</sup> / <sub>32</sub>
1/2	0.096	1 <sup>3</sup> / <sub>4</sub>
1/2 x 3/4	0.132	1 <sup>27</sup> / <sub>32</sub>
3/4 x 1/2	0.107	1 <sup>25</sup> / <sub>32</sub>
3/4	0.145	1 <sup>7</sup> /8
1 x 1/2	0.146	2
1	0.220	2 1/16
11/4 x 1/2	0.193	2 3/16
1¼	0.322	2 3/8
1½	0.431	2 21/32
2	0.683	2 <sup>15</sup> /16





Adapter P x M – Wrot

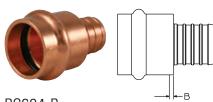
NOM. SIZE	APPROX. NET WT./LBS.	DIM. B INCHES
1/2	.103	7/8
1/2 x 3/8	.105	<sup>27</sup> / <sub>32</sub>
1/2 x 3/4	.191	11/4
3/4	.180	1 <sup>1</sup> / <sub>16</sub>
3/4 x 1/2	.189	31/32
3/4 x 1	.268	1 <sup>3</sup> /16
1	.255	1 <sup>3</sup> / <sub>32</sub>
1 x 3/4	.253	1 <sup>1</sup> / <sub>32</sub>
1 x 1¼	.457	1 <sup>17</sup> /32
11⁄4	.467	1 <sup>13</sup> /32
1¼ x 1	.335	1 <sup>3</sup> / <sub>16</sub>
1¼ x 1½	.537	1 <sup>1</sup> / <sub>2</sub>
11/2	.696	1 <sup>1</sup> / <sub>2</sub>
1½ x 1¼	.603	1 <sup>3</sup> /8
1½ x 2	.784	1 <sup>7</sup> /16
2	.856	1 <sup>7</sup> /16
2 x 1½	1.087	1 <sup>19</sup> /32
2 ½	1.322	1 <sup>27</sup> /32
3	2.104	21/8
4	3.298	29/32
	•	



PC604-2 Extended Adapter FTG x M – Wrot

APPROX. NET WT./LBS.	DIM. B INCHES
0.056	13/4
0.101	1 <sup>29</sup> / <sub>32</sub>
0.145	21/16
0.100	1 <sup>15</sup> / <sub>16</sub>
0.136	21/16
0.175	21/16
0.243	25/16
0.408	2 <sup>17</sup> / <sub>32</sub>
0.530	27/8
0.782	3 <sup>11</sup> / <sub>32</sub>
	0.056 0.101 0.145 0.100 0.136 0.175 0.243 0.408 0.530

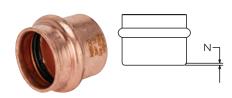
## ADAPTERS (cont.)



PC604-P
Adapter PEX x P – Wrot

NOM. SIZE	approx. Net Wt./LBS.	DIM. B INCHES
1/2 x 1/2	.055	1/8
1/2 x 3/4	.108	7/32
3/4 x 1/2	.057	3/32
3/4 x 3/4	.108	5/32
1 x 1	.148	5/32

#### **CAPS**

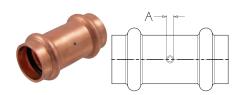


PC617 Cap P – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. N INCHES
1/2	.046	5/32
3/4	.087	5/32
1	.125	1/8
11⁄4	.171	<sup>3</sup> / <sub>32</sub>
1½	.314	3/32
_ 2	.493	3/32
21/2	.476	7/32
3	.713	7/32
4	1.491	1/4



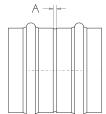
#### **COUPLINGS**



PC600-DS Coupling P x P – Wrot

NOM. SIZE	approx. Net Wt./LBS.	DIM. A INCHES
1/2	.083	3/16
3/4	.157	5/32
1	.198	5/32
11⁄4	.271	5/32
1½	.530	<sup>3</sup> / <sub>16</sub>
2	.691	5/32
21/2	.669	1/8
3	.979	1/8
4	2.134	7/32



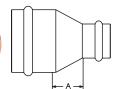


PC600-RS Coupling P x P – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
2½	.688	1/8
3	.979	1/8
4	2.134	7/32

#### COUPLINGS (Cont.)

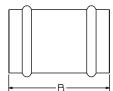




PC600-R
Reducing Coupling P x P – Wrot

- · · · · · · · · · · · · · · · · · · ·	1	
NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
3/4 x 1/2	.121	1/4
1 x 1/2	.139	<sup>7</sup> / <sub>16</sub>
1 x 3/4	.184	13/32
1¼ x 3/4	.245	1/2
1¼ x 1	.231	<sup>7</sup> /16
1½ x 3/4	.382	15/32
1½ x 1	.370	13/32
1½ x 1¼	.399	9/32
2 x 3/4	.516	29/32
2 x 1	.552	<sup>11</sup> / <sub>16</sub>
2 x 1¼	.570	<sup>11</sup> / <sub>16</sub>
2 x 1½	.662	<sup>7</sup> /16
2½ x 1	.620	31/32
2½ x 1¼	.644	1
2½ x 1½	.678	23/32
2½ x 2	.699	11/32
3 x 1½	.956	11/16
3 x 2	1.032	23/32
3 x 2½	.951	1/2
4 x 2	1.949	1 <sup>5</sup> / <sub>32</sub>
4 x 2½	1.807	1
4 x 3	1.960	27/32





PC601 (No Stop) Repair Coupling P x P – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. B INCHES
1/2	.082	13/4
3/4	.157	21/4
1	.190	21/4
11⁄4	.271	$2^{15}/_{32}$
1½	.511	3 11/32
_ 2	.691	3 5/8
2½	.669	2 15/16
3	.979	3 <sup>5</sup> /16
4	1.878	4 <sup>5</sup> / <sub>16</sub>

#### COUPLINGS (Cont.)



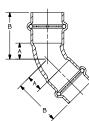


PC601L Extended Repair Coupling P x P

NOM. SIZE	APPROX. NET WT./LBS.	DIM. B INCHES
1/2	.1250	2 29/32
3/4	.2200	3 9/32
1	.3050	3 21/32
11/4	.4090	4 1/16
1½	.7150	4 21/32
2	1.0230	5 <sup>1</sup> / <sub>4</sub>

#### **ELBOWS**



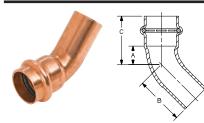


PC606 45° Elbow P x P – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1/2	.092	13/32	1 <sup>1</sup> /8
3/4	.181	1/2	1 <sup>13</sup> /32
1	.251	<sup>5</sup> /8	1 <sup>1</sup> / <sub>2</sub>
11/4	.403	<sup>25</sup> / <sub>32</sub>	1 <sup>25</sup> /32
1½	.666	<sup>15</sup> /16	2 <sup>5</sup> /16
2	1.063	1 <sup>3</sup> / <sub>16</sub>	2 <sup>23</sup> / <sub>32</sub>
21/2	1.041	<sup>7</sup> /8	23/8
3	1.536	11/8	$2^{25}/32$
4	3.375	<b>1</b> <sup>11</sup> / <sub>16</sub>	3 <sup>27</sup> / <sub>32</sub>



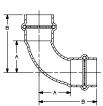
#### ELBOWS (Cont.)



PC606-2 45° Elbow Ftg x P – Wrot

NOM. SIZE	approx. Net Wt. LBS.		MENSION INCHES B	S C
1/2	.094	<sup>7</sup> / <sub>16</sub>	$1^{5}/_{16}$	1 <sup>1</sup> / <sub>8</sub>
3/4	.171	17/32	$1^{13}/_{32}$	$1^{13}/_{32}$
1	.248	<sup>9</sup> / <sub>16</sub>	$1^{17}/_{32}$	$1^{7}/_{16}$
11/4	.368	<sup>11</sup> / <sub>16</sub>	$1^{3}/_{4}$	$1^{11}/_{16}$
1½	.673	$1^{13}/_{16}$	$2^{5}/_{16}$	$2^{3}/_{16}$
2	1.057	1	$2^{21}/_{32}$	$2^{1}/_{2}$
21/2	1.050	<sup>29</sup> / <sub>32</sub>	$2^{3}/_{16}$	$2^{3}/_{8}$
3	1.526	$1^{5}/_{32}$	$2^{19}/_{32}$	$2^{13}/_{16}$
4	3.284	$1^{17}/_{32}$	$3^3/_{32}$	$3^{11}/_{16}$

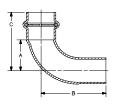




PC607 90° Elbow P x P – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1/2	.110	23/32	1 <sup>15</sup> /32
3/4	.223	13/32	2
3/4 x 1/2	.201	1 <sup>5</sup> /32	2
1	.331	1 <sup>15</sup> / <sub>32</sub>	211/32
1 x 3/4	.321	1 <sup>5</sup> / <sub>16</sub>	25/16
11⁄4	.528	$1^{27}/_{32}$	2 <sup>29</sup> / <sub>32</sub>
11/2	.895	$2^{7}/_{32}$	3 <sup>21</sup> / <sub>32</sub>
2	1.480	215/16	4 <sup>15</sup> / <sub>32</sub>
21/2	1.224	1 <sup>5</sup> /8	33/32
3	1.900	2	3 <sup>21</sup> / <sub>32</sub>
4	3.935	215/32	45/8

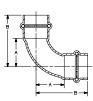




PC607-2 90° Elbow Ftg x P — Wrot

NOM. SIZE	approx. Net Wt. LBS.	DIMENSIONS INCHES A B C		
1/2	.110	<sup>25</sup> / <sub>32</sub>	$1^{21}/_{32}$	$1^{15}/_{32}$
3/4	.219	$1^{1}/_{16}$	$2^{7}/_{32}$	$1^{31}/_{32}$
1	.328	$1^{1}/_{2}$	$2^{5}/_{8}$	$2^{3}/_{8}$
11/4	.490	$1^{7}/_{8}$	$3^3/_{32}$	$2^{29}/_{32}$
1½	.871	$2^{7}/_{32}$	$3^{15}/_{16}$	$3^{11}/_{16}$
2	1.474	$2^{29}/_{32}$	$4^{17}/_{32}$	$4^{15}/_{32}$
21/2	1.356	$1^{19}/_{32}$	$3^{7}/_{32}$	$3^{1}/_{16}$
3	2.065	2	$3^{13}/_{16}$	$3^{21}/_{32}$
4	3.920	$2^{15}/_{32}$	$4^{3}/_{4}$	$4^{5}/_{8}$

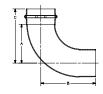




PC607-LT 90° Long Radius Elbow P x P — Wrot

NOM. SIZE	APPROX. NET WT/LBS.	DIM. A INCHES	DIM. B INCHES
2½	2.066	311/16	$5^{5}/_{32}$
3	2.810	41/32	511/16
4	5.696	5 <sup>1</sup> / <sub>4</sub>	7 <sup>13</sup> / <sub>32</sub>

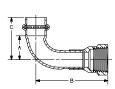




PC607-2-LT 90° Long Radius Elbow Ftg x P - Wrot

NOM. SIZE	approx. Net Wt. LBS.	DIMENSIONS INCHES A B C		S C
21/2	2.114	$3^{11}/_{16}$	$5^7/_{32}$	$5^{5}/_{32}$
3	3.037	$4^{1}/_{32}$	$5^{3}/_{4}$	$5^{11}/_{16}$

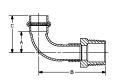




PC607-3 90° Elbow P x F - Wrot

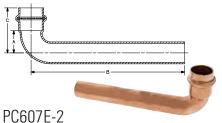
	APPROX. NET WT.	DIMENSIONS INCHES			
NOM. SIZE	LBS.	Α	В	С	
1/2	.191	$^{25}/_{32}$	$2^{17}/_{32}$	$1^{15}/_{32}$	
1/2 x 3/8	.154	<sup>25</sup> / <sub>32</sub>	$2^{7}/_{32}$	$1^{15}/_{32}$	
1/2 x 3/4	.251	<sup>25</sup> / <sub>32</sub>	$2^{11}/_{16}$	$1^{15}/_{32}$	
3/4	.361	$1^{1}/_{16}$	$3^{1}/_{8}$	2	
3/4 x 1/2	.321	$1^{1}/_{16}$	$2^{27}/_{32}$	2	
1	.513	$1^{1}/_{16}$	$3^{15}/_{32}$	$2^{5}/_{16}$	
11⁄4	.892	$1^{27}/_{32}$	$4^{3}/_{16}$	$2^{29}/_{32}$	
11/2	1.314	$2^{7}/_{32}$	$5^{1}/_{16}$	$3^{11}/_{16}$	
2	2.109	$2^{29}/_{32}$	$5^{5}/_{8}$	$4^{15}/_{32}$	





PC607-4 90° Elbow P x M - Wrot

NOM. SIZE	APPROX. NET WT. LBS.	DIN I A	MENSION NCHES B	s C
1/2	.183	<sup>25</sup> / <sub>32</sub>	$2^9/_{32}$	1 <sup>15</sup> / <sub>32</sub>
1/2 x 3/4	.340	<sup>25</sup> / <sub>32</sub>	2 <sup>21</sup> / <sub>32</sub>	$1^{15}/_{32}$
3/4	.349	$1^{1}/_{16}$	$3^{1}/_{32}$	2
3/4 x 1/2	.340	$1^{1}/_{16}$	$3^{1}/_{16}$	2
1	.521	$1^{7}/_{16}$	$3^{13}/_{32}$	$2^{5}/_{16}$
11/4	.926	$1^{27}/_{32}$	$4^{1}/_{32}$	$2^{29}/_{32}$
1½	1.443	$2^{7}/_{32}$	$4^{15}/_{16}$	$3^{11}/_{16}$
2	2.205	$2^{29}/_{32}$	$5^{5}/_{8}$	$4^{15}/_{32}$

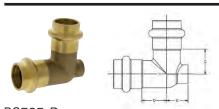


Extended Elbow P x FTG — Wrot

	approx. Net Wt.	DIMENSIONS INCHES		
NOM. SIZE	LBS.	Α	В	С
3/4	.407	29/32	61/8	$1^{25}/_{32}$



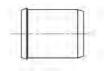
#### ELBOWS (Cont.)



PC705-D Vent Elbow P x P – Forged Brass

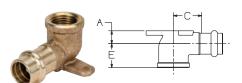
NOM. SIZE	approx. Net Wt. LBS.	DIMENSIONS INCHES C D E		
1/2	.010	19/32	19/32	<sup>9</sup> /16
3/4	.010	3/4	3/4	11/16





PC605 Stiffener – Wrot

NOM. SIZE	APPROX. NET WT. LBS.	
3/4	.043	



PC707-3-5-LF 90° Drop Elbow P x F — Cast \*Lead Free

NOM. SIZE	APPROX. NET WT. LBS.		леnsio Inches С	
1/2	.252	<sup>17</sup> / <sub>32</sub>	7/8	<sup>27</sup> / <sub>32</sub>
3/4	.588	<sup>23</sup> / <sub>32</sub>	1 <sup>5</sup> /8	31/32





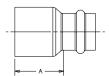
PC707-3-5-A Hi-Ear Elbow P x F — Cast \*Lead Free

NOM. SIZE	APPROX.	DIM. C	DIM. E
	NET WT/LBS.	INCHES	INCHES
1/2	.192	7/8	<sup>27</sup> / <sub>32</sub>

Visit our website for the most current information.

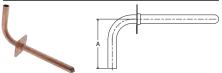
#### FITTING REDUCERS





Fitting Reducer Ftg x P – Wrot

NOM. SIZE	APPROX. NET WT/LBS.	DIM. A INCHES
1/2	.610	<sup>21</sup> / <sub>32</sub>
3/4 x 1/2	.092	17/16
3/4	.126	31/32
1 x 1/2	.123	1 <sup>7</sup> / <sub>16</sub>
1 x 3/4	.151	1 <sup>13</sup> / <sub>32</sub>
1	.162	1 <sup>1</sup> /8
1¼ x 1/2	.155	1 <sup>19</sup> / <sub>32</sub>
1¼ x 3/4	.175	1 <sup>13</sup> / <sub>32</sub>
1¼ x 1	.181	17/16
11⁄4	.215	13/16
1½ x 1/2	.243	23/32
1½ x 3/4	.248	$1^{31}/_{32}$
1½ x 1	.251	<b>1</b> 13/16
1½ x 1¼	.251	$1^{25}/_{32}$
1½	.382	1 <sup>5</sup> / <sub>16</sub>
2 x 1/2	.394	21/2
2 x 3/4	.405	211/32
2 x 1	.398	27/32
2 x 1¼	.420	23/32
2 x 1½	.507	$1^{31}/_{32}$
2	.619	1 <sup>9</sup> / <sub>16</sub>
2½ x 3/4	.540	21/2
2½ x 1	.707	21/2
2½ x 1¼	.776	29/16
2½ x 1½	.840	$2^{13}/_{32}$
2½ x 2	.839	2
3 x 3/4	.755	$2^{29}/_{32}$
3 x 1¼	.882	213/16
3 x 1½	1.055	213/16
3 x 2	1.084	23/8
3 x 2½	.820	21/4
4 x 3/4	1.723	43/32
4 x 2	1.832	35/8
4 x 2½	1.837	31/32
4 x 3	2.013	31/32
T .	1	

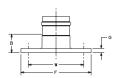


### PC607-2EW Stub-Out F x S

NOM. SIZE	NET WT/LBS.	INCHES	
1/2	.360	35/8	
3/4	.520	315/16	
1	.740	61/16	

#### **FLANGES**





PC741 <u></u>

Companion Flange P x Flange - Cast Bronze Flange/ Wrot Outlet

	APPROX. NET WT.	D	IMENSION INCHES		
NOM. SIZE	LBS.	В	F	G	W
1	1.428	$1^{1}/_{4}$	$4^{1}/_{4}$	1/4	$3^{1}/_{8}$
11/4	1.632	$1^{5}/_{16}$	$4^{5}/_{8}$	1/4	$3^{1}/_{2}$
1½	2.186	$1^{7}/_{16}$	5	<sup>5</sup> / <sub>16</sub>	$3^{7}/8$
2	3.352	111/16	6	3/8	$4^{3}/_{4}$

NOTE: Maximum pressure 105 psi CWP, 90 psi at 250°F. Use in U.S. drinking water applications is prohibited after January 3, 2014.







PC641 S=# Companion Flange P x Flange - Wrot

NOM. SIZE	APPROX. NET WT. LBS.		MENSIONS NCHES B	S C
3/4	1.518	$1^{21}/_{32}$	$2^{17}/_{32}$	<sup>7</sup> / <sub>16</sub>
1	2.013	$1^{23}/_{32}$	$2^{19}/_{32}$	1/2
11/4	2.623	$1^{21}/_{32}$	$2^{21}/_{32}$	<sup>9</sup> / <sub>16</sub>
1½	3.342	$1^{1}/_{2}$	$2^{7}/_{8}$	5/8
2	4.884	$1^{15}/_{32}$	211/32	5/8
21/2	6.418	3/4	$2^{25}/_{32}$	5/8
3	7.409	<sup>15</sup> / <sub>32</sub>	$2^{15}/_{16}$	<sup>21</sup> / <sub>32</sub>
4	10.920	<sup>21</sup> / <sub>32</sub>	$3^{3}/_{8}$	23/32

	DIMENSIONS INCHES				
NOM. SIZE	D	E	F	G	
3/4	<sup>9</sup> / <sub>16</sub>	$2^{3}/_{4}$	$3^{7}/_{8}$	5/8	
1	5/8	$3^{1}/_{8}$	$4^{1}/_{4}$	5/8	
1¼	<sup>11</sup> / <sub>16</sub>	$3^{1}/_{2}$	$4^{5}/_{8}$	5/8	
1½	$^{25}/_{32}$	$3^{7}/_{8}$	5	5/8	
2	$^{25}/_{32}$	$4^{3}/_{4}$	6	3/4	
21/2	3/4	$5^{1}/_{2}$	7	3/4	
3	<sup>13</sup> / <sub>16</sub>	6	$7^{1}/_{2}$	3/4	
4	1	$7^{1/2}$	9	3/4	

NOTE: 4" requires (8) "G" holes equally spaced. NOTE: Mates with ANSI Class 125/150 flanges.

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  $\leq 0.25\%$ 



## FLANGES (Cont.)



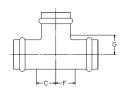
PC672-2 Companion Flange FTG x Flange – Wrot

NOM. SIZE	APPROX. NET WT. LBS.	D A	IMENSIOI INCHES C	NS D
2	5.46	6	<sup>5</sup> /8	<sup>25</sup> / <sub>32</sub>
21/2	7.44	6	5/8	<sup>25</sup> / <sub>32</sub>
3	8.63	6	5/8	<sup>25</sup> / <sub>32</sub>
4	12.03	6	23/32	7/8

Nom. Size	D E	IMENSION INCHES F	IS G
2	4 3/4	6	3/4
21/2	5 <sup>1</sup> / <sub>2</sub>	7	3/4
3	6	7 1/2	3/4
4	7 1/2	9	3/4

#### **TEES**





PC611Tee P x P x P - Wrot

NOM. SIZE	APPROX. NET WT. LBS.		MENSIO INCHES F	
1/2	.176	23/32	<sup>23</sup> / <sub>32</sub>	15/32
1/2 x 1/2 x 3/4	.314	21/16	21/16	<sup>15</sup> /16
1/2 x 1/2 x 1	.491	17/32	$1^7/_{32}$	7/8
3/4	.320	<sup>25</sup> / <sub>32</sub>	<sup>25</sup> / <sub>32</sub>	21/32
3/4 x 1/2 x 1/2	.281	<sup>5</sup> /8	<sup>29</sup> / <sub>32</sub>	21/32
3/4 x 1/2 x 3/4	.320	<sup>21</sup> / <sub>32</sub>	11/16	<sup>11</sup> / <sub>16</sub>
3/4 x 3/4 x 1/2	.276	<sup>21</sup> / <sub>32</sub>	<sup>21</sup> / <sub>32</sub>	21/32
3/4 x 3/4 x 1	.461	11/32	11/32	<sup>29</sup> / <sub>32</sub>
1	.501	<sup>7</sup> /8	7/8	<sup>29</sup> / <sub>32</sub>
1 x 1/2 x 3/4	.400	<sup>23</sup> / <sub>32</sub>	11/4	<sup>27</sup> / <sub>32</sub>
1 x 1/2 x 1	.513	<sup>13</sup> /16	$1^{5}/_{32}$	<sup>27</sup> / <sub>32</sub>
1 x 3/4 x 1/2	.440	<sup>13</sup> /16	11/16	$1^{5}/_{32}$
1 x 3/4 x 3/4	.459	<sup>25</sup> / <sub>32</sub>	31/32	<sup>13</sup> /16

# TEES (Cont.)

NOM. SIZE		
Nom. Size		
1 x 1 x 1/2	NOM. SIZE	LBS. C F G
1 x 1 x 3/4         .388         3/4         3/4         27/32           1 x 1 x 1 1/4         .723         11/8         11/8         7/8           11/4         .759         1         1         15/16           11/4         x 1 / 2         .674         31/32         15/32         15/16           11/4         x 1 x 1/2         .682         15/16         19/32         15/8           11/4         x 3/4 x 1/2         .682         15/16         19/32         15/8           11/4         x 3/4 x 1         .709         31/32         11/4         15/16           11/4         x 3/4         .565         3/4         17/32         11/32           11/4         x 3/4         .569         31/32         19/32         15/16           11/4         x 1/3         .753         27/32         13/16         11/32           11/4         x 1/4         x 1/2         .408         1         1         117/32           11/4         x 1/4         x 1         .508         7/8         31/32         15/16         13/32         15/16         11/3/32         15/16         11/3/32         15/16         11/3/32         15/16         11/3/32	1 x 3/4 x 1	.578 <sup>13</sup> /16 1 <sup>1</sup> /16 <sup>7</sup> /8
1 x 1 x 1 ¼         .723 1 1/8 11/8 11/8 7/8           1¼         .759 1 1 1 15/16           1¼ x 1/2 x 1¼         .690 31/32 11/32 31/32           1¼ x 1 x 1/2         .674 31/32 15/32 15/8           1¼ x 3/4 x 1/2         .682 15/16 19/32 15/8           1¼ x 3/4 x 1/2         .682 15/16 19/32 11/32           1¼ x 3/4 x 11         .709 31/32 11/4 15/16           1¼ x 3/4 x 11         .698 31/32 19/32 15/16           1¼ x 1 x 3/4         .753 27/32 13/16 113/32           1¼ x 1¼ x 1/2         .408 1 1 11/7/32           1¼ x 1¼ x 3/4         .589 23/32 23/32 15/16           1¼ x 1¼ x 3/4         .589 23/32 23/32 15/16           1¼ x 1¼ x 3/4         .589 23/32 23/32 15/16           1½ x 1½ x 3/4         .589 23/32 23/32 15/16           1½ x 1½ x 1½         .508 7/8 7/8 31/32           1½ x 1/2 x 1½         .263 29/32 129/32 1           1½ x 3/4 x 3/4         .101 29/32 113/16 13/4           1½ x 1 x 3/4         .1.105 13/16 111/16 119/32           1½ x 1 x 1         .1.105 13/16 111/16 119/32           1½ x 1 x 1         .1.105 13/16 111/16 119/32           1½ x 1 x 1         .1.105 13/16 111/16 119/32           1½ x 1 x 1         .1.105 13/16 111/16 119/32           1½ x 1½ x 1         .1.105 13/16 111/16 11/16 119/32		.324 21/32 21/32 7/8
1 x 1 x 1 1/4         .723         11/8         11/8         7/8           1 /4         .759         1         1         15/16           1 /4 x 1 /2 x 1 1/4         .690         31/32         117/32         31/32           1 /4 x 1 x 1 /2         .674         31/32         15/32         15/8           1 /4 x 3 /4 x 1 /2         .682         15/16         19/32         15/8           1 /4 x 3 /4 x 1 /2         .682         15/16         19/32         11/32           1 /4 x 3 /4 x 1 /4         .698         31/32         11/32         11/32           1 /4 x 1 x 3 /4         .753         27/32         13/16         13/32           1 /4 x 1 /4 x 1 /2         .408         1         1         11/3/32           1 /4 x 1 /4 x 1 /2         .408         1         1         11/3/32           1 /4 x 1 /4 x 1 /2         .408         1         1         11/3/32           1 /4 x 1 /4 x 1 /2         .408         1         1         11/3/32           1 /4 x 1 /4 x 1 /2         .108         7/8         7/8         31/32           1 /2 x 1 /2 x 1/2         .11/3         .15/16         15/16         13/32         15/16           1 /4 x 1 /4	1 x 1 x 3/4	
1½ x 1/2 x 1½         .690         3¹/32         1¹/32         3¹/32         1⁵/32         1⁵/8           1½ x 3/4 x 1/2         .682         ¹⁵/16         1³/32         1⁵/8           1½ x 3/4 x 1/2         .682         ¹⁵/16         1³/32         1¹/32           1½ x 3/4 x 1         .565         ³/4         1²/32         1¹/32           1½ x 3/4 x 1½         .698         ³¹/32         1³/16         1¹/32           1½ x 1½ x 1/2         .408         1         1         1¹²/32           1½ x 1½ x 1½         .408         1         1         1¹²/32           1½ x 1½ x 1½         .408         1         1         1¹²/32           1½ x 1½ x 1½         .408         1         1         1¹²/32           1½ x 1½ x 1½         .589         ²³/32         ²³/32         ¹⁵/16           1½ x 1½ x 1½         .1263         ²²/32         ²³/32         ¹           1½ x 1/2 x 1½         .1263         ²²/32         ¹         ¹           1½ x 1½ x 1½         .1263         ²²/32         ¹         ¹           1½ x 1½ x 1½         .1663         ¹³/32         ¹         ¹           1½ x 1½ x 1½         .1663         ¹³/36	1 x 1 x 1¼	
1½ x 1 x 1/2         .674         31/32         15/32         15/8           1½ x 3/4 x 1/2         .682         15/16         19/32         15/8           1½ x 3/4 x 1         .565         3/4         17/32         11/32           1½ x 3/4 x 1½         .698         31/32         19/32         15/16           1½ x 1 x 3/4         .753         27/32         13/16         113/32           1½ x 1 x 1         .725         31/32         17/32         19/32           1½ x 1¼ x 1/2         .408         1         1         117/32           1½ x 1¼ x 3/4         .589         23/32         23/32         15/16           1½ x 1½ x 1/2         .408         1         1         117/32           1½ x 1½ x 3/4         .589         23/32         23/32         15/16           1½ x 1/2 x 1½         .1263         29/32         1           1½ x 1/2 x 1½         .1263         29/32         1           1½ x 1/2 x 1½         .1263         29/32         1           1½ x 1½ x 1/2         .136         11/16         19/16           1½ x 1½ x 1½         .146         27/32         121/32         1/8           1½ x 1 x 1         .1.10	11⁄4	.759 1 1 <sup>15</sup> / <sub>16</sub>
1½ x 3/4 x 1/2         .682         15/16         19/32         15/8           1½ x 3/4 x 3/4         .565         3/4         17/32         11/32           1½ x 3/4 x 1½         .698         31/32         19/32         15/16           1½ x 1 x 1         .753         27/32         13/16         113/32           1½ x 1¼ x 1/2         .408         1         1 17/32           1½ x 1¼ x 3/4         .589         23/32         23/32         15/16           1½ x 1¼ x 3/4         .589         23/32         23/32         15/16           1½ x 1½ x 1½         .508         7/8         7/8         31/32           1½ x 1/2 x 1½         .508         7/8         7/8         31/32           1½ x 1/2 x 1½         1.263         29/32         129/32         1           1½ x 1/2 x 1½         1.263         29/32         13/16         13/32           1½ x 1/2 x 1½         1.263         29/32         13/16         13/4           1½ x 1/2 x 1½         1.263         29/32         13/16         13/4           1½ x 1½ x 1/2         1.36         1.101         19/32         13/2           1½ x 1 x 1         1.105         13/16         11/16	1¼ x 1/2 x 1¼	.690 31/32 117/32 31/32
1½ x 3/4 x 3/4         .565         3/4         1/3z         11/3z           1½ x 3/4 x 1         .709         31/3z         11/4         15/16           1½ x 3/4 x 1¼         .698         31/3z         19/3z         15/16           1½ x 1 x 1         .725         31/3z         13/16         113/3z           1½ x 1¼ x 1/2         .408         1         1         117/3z           1½ x 1¼ x 3/4         .589         23/3z         23/3z         15/16           1½ x 1¼ x 1¼         .508         7/8         31/3z         1           1½ x 1½         1.263         29/3z         129/3z         1           1½ x 1/2 x 1½         1.263         29/3z         13/16         13/4           1½ x 1/2 x 1½         1.263         29/3z         13/16         13/4           1½ x 1 x 1         1.01         29/3z         13/16         13/4           1½ x 1 x 1         1.105         13/16         11/16         19/3z           1½ x 1 x 1         1.105         13/16         11/16         19/3z           1½ x 1 x 1         1.105         13/16         11/16         11/93           1½ x 1 x 1         1.105         13/16         11/16		.674 <sup>31</sup> / <sub>32</sub> 1 <sup>5</sup> / <sub>32</sub> 1 <sup>5</sup> / <sub>8</sub>
1¼ x 3/4 x 1       .709 3¹/32 1¹/4 1⁵/16         1¼ x 3/4 x 1¼       .698 3¹/32 19³/32 ¹⁵/16         1¼ x 1 x 3/4       .753 2²/32 1³/16 1¹³/32         1¼ x 1 x 1       .725 3¹/32 1³/32 1³/32 19³/32         1¼ x 1¼ x 1/2       .408 1 1 1¹¹/32         1¼ x 1¼ x 3/4       .589 2³/32 2³/32 2³/32 1⁵/16         1¼ x 1¼ x 1       .508 7/8 7/8 ³¹/32         1½ x 1½ x 1½       1.263 29/32 1²2/32 1         1½ x 1/2 x 1½       1.263 29/32 1³/16 1³/16 1³/4         1½ x 1 x 3/4       1.101 29/32 1¹³/16 1³/16 1³/4         1½ x 1 x 1       1.105 ¹³/16 1³/16 1³/16 1³/4         1½ x 1 x 1½       1.263 29/32 1²/32 1³/32 1         1½ x 1/2 x 1½       1.263 29/32 1³/36 1³/16 1³/16 1³/16         1½ x 1 x 1       1.105 ³³/16 1³/16 1³/16 1³/16 1³/16         1½ x 1 x 1½       1.146 2²/32 1²/32 1¹/32 1¹/8         1½ x 1 x 1½       1.165 1³/16 1³/16 1³/16 1³/16         1½ x 1¼ x 3/4       1.164 3¹/32 1⁵/8 1³/32 1⁵/8         1½ x 1¼ x 1¼       1.160 1⁵/16 19/16 1³/32 1⁵/8         1½ x 1½ x 1¼       1.160 1⁵/16 19/16 1³/32 1³/32         1½ x 1½ x 1¼       1.160 1³/16 1³/16 1³/16 1³/32         1½ x 1½ x 1¼       1.262 7/8 7/8 1³/32         1½ x 1½ x 1½       1.363 1³/32 2¹/2 1²/16 2³/8         1½ x 1½ x 1¼       1.262 1²/8 1²/8 1³/32     <	1¼ x 3/4 x 1/2	.682 <sup>15</sup> / <sub>16</sub> 1 <sup>9</sup> / <sub>32</sub> 1 <sup>5</sup> / <sub>8</sub>
1½ x 3/4 x 1½       .698 3¹/32 1²/32 1³/16 1¹/3/32         1½ x 1 x 3/4       .753 2²/32 1³/16 1¹/3/32         1½ x 1 x 1       .725 3¹/32 1²/32 1³/16 1³/32         1½ x 1¼ x 1/2       .408 1 1 1¹/7/32         1½ x 1¼ x 3/4       .589 2³/32 2³/32 1³/32 1⁵/16         1½ x 1¼ x 1       .508 7/8 7/8 ³¹/32         1½ x 1½ x 1½       1.263 2³/32 1²²/32 1         1½ x 3/4 x 3/4       1.101 2³/32 1³/16 1³/16 1³/4         1½ x 1 x 3/4       1.217 1⁵/16 1³/16 1³/16 1³/4         1½ x 1 x 1       1.105 1³/16 1¹¹/16 1³/932         1½ x 1 x 1½       1.146 2³/32 1²¹/32 1¹/8         1½ x 1¼ x 3/4       1.164 3¹/32 1⁵/8 1³/8 1³/8         1½ x 1¼ x 1½       1.166 3¹/32 1⁵/8 1³/8 1³/8         1½ x 1¼ x 1½       1.166 3¹/32 1⁵/8 1³/8 1³/8         1½ x 1¼ x 1¼       1.160 1⁵/16 1³/16 1³/16 1³/18         1½ x 1½ x 1½       1.639 3/8 3/8 1¹/8         1½ x 1½ x 1½       1.360 1⁵/16 1³/16 1³/32 1⁵/8         1½ x 1½ x 1½       1.160 1⁵/16 1³/16 1³/16 1³/18         1½ x 1½ x 1½       1.160 1⁵/16 1³/16 1³/16 1³/8         1½ x 1½ x 1½       1.160 1⁵/16 1³/16 1³/16 1³/8         1½ x 1½ x 1½       1.160 1⁵/16 1³/16 1³/16 1³/8         1½ x 1½ x 1½       1.160 1²/16 1³/16 1³/16 1³/16         1½ x 1½ x 1½       1.160 1²/16 1³/16 1³/16 1³/16		
1¼ x 1 x 3/4       .753 27/32 13/16 113/32         1¼ x 1 x 1       .725 31/32 17/32 19/32         1¼ x 1¼ x 1/2       .408 1 1 117/32         1¼ x 1¼ x 3/4       .589 23/32 23/32 15/16         1¼ x 1¼ x 1       .508 7/8 7/8 31/32         1½ 11/2       1.179 15/16 15/16 13/32         1½ x 1/2 x 1½       1.263 29/32 129/32 1         1½ x 3/4 x 3/4       1.101 29/32 113/16 13/4         1½ x 1 x 1/2       1.146 27/32 121/32 11/8         1½ x 1 x 1½       1.164 31/32 15/8 17/8         1½ x 1¼ x 3/4       1.164 31/32 15/8 17/8         1½ x 1¼ x 3/4       1.164 31/32 15/8 17/8         1½ x 1¼ x 1       1.105 7/8 119/32 15/8         1½ x 1¼ x 1/4       1.160 15/16 19/16 119/32         1½ x 1½ x 1/2       .639 3/8 3/8 11/8         1½ x 1½ x 1/2       .639 3/8 3/8 11/8         1½ x 1½ x 1/2       .639 3/8 3/8 11/8         1½ x 1½ x 1/4       1.760 15/16 19/16 119/32         1½ x 1½ x 1/2       .639 3/8 3/8 11/8         1½ x 1½ x 1/4       1.785 11/16 11/16 13/16         1½ x 1½ x 1/4       1.760 19/32 19/32 13/32         1½ x 1½ x 1/4       1.765 11/16 13/32 21/2 17/16         2 x 1½ x 1½       1.771 113/32 113/32 113/32         2 x 1½ x 1½       1.764 113/32 21/2 17/16 <t< td=""><td></td><td>.709 31/32 11/4 15/16</td></t<>		.709 31/32 11/4 15/16
1½ x 1 ½ x 1/2       .725 31/32 17/32 19/32         1½ x 1½ x 1/2 x 1/2       .408 1 1 117/32         1½ x 1¼ x 3/4       .589 23/32 23/32 15/16         1½ x 1¼ x 1       .508 7/8 7/8 31/32         1½ x 1/2 x 1½       1.263 29/32 129/32 1         1½ x 3/4 x 3/4       1.101 29/32 113/16 13/4         1½ x 1 x 3/4       1.217 15/16 13/4 113/16         1½ x 1 x 1       1.105 13/16 111/16 119/32         1½ x 1 x 1½       1.146 27/32 121/32 11/8         1½ x 1¼ x 3/4       1.164 31/32 15/8 17/8         1½ x 1¼ x 1       1.105 7/8 119/32 15/8         1½ x 1¼ x 1½       1.160 15/16 19/16 119/32         1½ x 1¼ x 1/2       .639 3/8 3/8 11/8         1½ x 1½ x 3/4       .740 19/32 19/32 13/32         1½ x 1½ x 3/4       .785 11/16 11/16 13/16         1½ x 1½ x 3/4       .785 11/16 11/16 13/16         1½ x 1½ x 3/4       .785 11/16 11/16 13/16         1½ x 1½ x 3/4       .785 11/16 11/16 13/16         1½ x 1½ x 3/4       .785 11/16 11/16 13/16         1½ x 1½ x 1/4       1.262 7/8 7/8 119/32         2 x 1/2 x 1       .785 11/16 11/16 13/16         1½ x 1½ x 1½       .785 11/16 11/16 13/16         1½ x 1½ x 1½       .785 11/16 11/16 13/32         2 x 1 x 1       .764 113/32 21/14 27/32	1¼ x 3/4 x 1¼	.698 <sup>31</sup> / <sub>32</sub> 1 <sup>9</sup> / <sub>32</sub> <sup>15</sup> / <sub>16</sub>
1¼ x 1¼ x 1/2       .408 1 1 1 11/32         1¼ x 1¼ x 3/4       .589 23/32 23/32 15/16         1½ x 1¼ x 1       .508 7/8 7/8 31/32         1½ x 1/2 x 1½       1.179 15/16 15/16 13/32         1½ x 1/2 x 1½       1.263 29/32 129/32 1         1½ x 3/4 x 3/4       1.101 29/32 113/16 13/4         1½ x 1 x 1       1.105 13/16 111/16 19/32         1½ x 1 x 1½       1.146 27/32 121/32 11/8         1½ x 1¼ x 3/4       1.164 31/32 15/8 17/8         1½ x 1¼ x 1       1.105 7/8 119/32 15/8         1½ x 1¼ x 1       1.105 7/8 119/32 15/8         1½ x 1¼ x 1¼       1.160 15/16 19/16 119/32         1½ x 1½ x 1/2 639 3/8 3/8 11/8         1½ x 1½ x 1/2 1/2 639 3/8 3/8 11/8         1½ x 1½ x 1/2 1/2 639 3/8 3/8 11/8         1½ x 1½ x 1/2 1/2 1/16 13/16 11/16 13/16         1½ x 1½ x 1/2 1/2 1/32 19/32 19/32 13/32         1½ x 1½ x 1/4 1/2 1/2 1/2 1/32 19/32 19/32 13/32         2 x 1/2 x 1½ x 1       1.262 7/8 7/8 11/16 11/16 13/16         1½ x 1½ x 1¼       1.262 7/8 7/8 11/16 11/16 13/16         1½ x 1½ x 1½       1.564 113/32 21/2 17/16         2 x 1 x 1       1.764 113/32 21/32 21/4 27/32         2 x 1 x 1       1.764 113/32 21/16 21/8         2 x 1½ x 1½       1.546 13/8 129/32 21/4         2 x 1½ x 1½       1.576	1¼ x 1 x 3/4	$.753 \ ^{27}/_{32} \ 1^{3}/_{16} \ 1^{13}/_{32}$
1¼ x 1¼ x 3/4         .5889         23/32         23/32         15/16           1½ x 1¼ x 1         .508         7/8         7/8         31/32           1½ x 1/2 x 1½         1.179         15/16         15/16         13/32           1½ x 1/2 x 1½         1.263         29/32         129/32         1           1½ x 3/4 x 3/4         1.101         29/32         113/16         13/4           1½ x 1 x 1         1.105         13/16         111/16         119/32           1½ x 1 x 1½         1.146         27/32         121/32         11/8           1½ x 1¼ x 3/4         1.164         31/32         15/8         17/8           1½ x 1¼ x 3/4         1.164         31/32         15/8         17/8           1½ x 1¼ x 1¼         1.160         15/16         19/16         11/9           1½ x 1½ x 1¼         1.160         15/16         19/16         11/9           1½ x 1½ x 1¼         1.160         15/16         19/16         11/9           1½ x 1½ x 1¼         1.160         15/16         19/16         11/9           1½ x 1½ x 1½         1.639         3/8         3/8         11/8           1½ x 1½ x 1½         1.660         15/16	1¼ x 1 x 1	$.725 \ ^{31}/_{32} \ 1^{7}/_{32} \ 1^{9}/_{32}$
1½ x 1¼ x 1       .508       7/8       7/8       31/32         1½ x 1/2 x 1½       1.179       15/16       15/16       13/32         1½ x 1/2 x 1½       1.263       29/32       129/32       1         1½ x 3/4 x 3/4       1.101       29/32       113/16       13/4         1½ x 1 x 3/4       1.217       15/16       13/4       11/316         1½ x 1 x 1½       1.105       13/16       111/16       119/32         1½ x 1¼ x 3/4       1.164       31/32       15/8       17/8         1½ x 1¼ x 1¼       1.105       7/8       119/32       15/8         1½ x 1¼ x 1¼       1.160       15/16       19/16       119/32         1½ x 1½ x 1½       .639       3/8       3/8       1/8         1½ x 1½ x 1½       .639       3/8       3/8       1/9         1½ x 1½ x 1/2       .639       3/8       3/8       1/9         1½ x 1½ x 1/2       .639       3/8       3/8       1/9         1½ x 1½ x 1/2       .639       3/8       3/8       1/9         1½ x 1½ x 1/2       .639       3/8       3/8       1/9         1½ x 1½ x 1½       .740       19/32       19/32       13/3	1¼ x 1¼ x 1/2	.408 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1½       1.179       15/16       15/16       13/32         1½ x 1/2 x 1½       1.263       29/32       129/32       1         1½ x 3/4 x 3/4       1.101       29/32       113/16       13/4         1½ x 1 x 1       1.105       13/16       111/16       119/32         1½ x 1 x 1½       1.146       27/32       121/32       11/8         1½ x 1¼ x 3/4       1.164       31/32       15/8       17/8         1½ x 1¼ x 1       1.105       7/8       119/32       15/8         1½ x 1¼ x 1¼       1.160       15/16       19/16       119/32         1½ x 1½ x 1½       .639       3/8       3/8       11/8         1½ x 1½ x 1½       .639       3/8       3/8       1/9         1½ x 1½ x 3/4       .740       19/32       19/32       13/32         1½ x 1½ x 1¼       1.262       7/8       11/16       13/16         1½ x 1½ x 1¼       1.262       7/8       1/8       11/9         1½ x 1½ x 1¼       1.262       7/8       7/8       11/9         1½ x 1½ x 1¼       1.262       7/8       7/8       11/9         2 x 1 x 1       1.764       113/32       21/2       17/16<	1¼ x 1¼ x 3/4	.589 23/32 23/32 15/16
1½       1.179       15/16       15/16       13/32         1½ x 1/2 x 1½       1.263       29/32       129/32       1         1½ x 3/4 x 3/4       1.101       29/32       113/16       13/4         1½ x 1 x 1       1.105       13/16       111/16       119/32         1½ x 1 x 1½       1.146       27/32       121/32       11/8         1½ x 1¼ x 3/4       1.164       31/32       15/8       17/8         1½ x 1¼ x 1       1.105       7/8       119/32       15/8         1½ x 1¼ x 1¼       1.160       15/16       19/16       119/32         1½ x 1½ x 1½       .639       3/8       3/8       11/8         1½ x 1½ x 1½       .639       3/8       3/8       1/9         1½ x 1½ x 3/4       .740       19/32       19/32       13/32         1½ x 1½ x 1¼       1.262       7/8       11/16       13/16         1½ x 1½ x 1¼       1.262       7/8       1/8       11/9         1½ x 1½ x 1¼       1.262       7/8       7/8       11/9         1½ x 1½ x 1¼       1.262       7/8       7/8       11/9         2 x 1 x 1       1.764       113/32       21/2       17/16<	1¼ x 1¼ x 1	.508 7/8 7/8 31/32
1½ x 3/4 x 3/4       1.101       29/32       11³/16       13/4         1½ x 1 x 3/4       1.217       15/16       13/4       11³/16         1½ x 1 x 1       1.105       13/16       11¹/16       119/32         1½ x 1 x 1½       1.146       2²/32       12¹/32       1¹/8         1½ x 1¼ x 3/4       1.164       3¹/32       15/8       1²/8         1½ x 1¼ x 1¼       1.105       7/8       1¹9/32       15/8         1½ x 1¼ x 1¼       1.160       15/16       19/16       1¹9/32         1½ x 1½ x 1½       .639       3/8       3/8       1¹/8         1½ x 1½ x 3/4       .740       19/32       19/32       1³/32         1½ x 1½ x 1½       .785       1¹/16       1¹/16       1³/16         1½ x 1½ x 1¼       1.262       7/8       7/8       1¹9/32         2       1.771       1¹3/32       1¹3/32       1³/32         2 x 1/2 x 1½       1       1.262       7/8       1¹9/32         2 x 1 x 2       1.663       1³/3/32       1¹3/32       1¹3/32         2 x 1 x 1       1.764       1¹3/32       2¹/2       1²/16         2 x 1 x 2       1.564       1¹3/32       2¹/2	1½	
1½ x 1 x 3/4       1.217       15/16       13/4       11/3/16         1½ x 1 x 1       1.105       13/16       11/1/16       11/9/32         1½ x 1 x 1½       1.146       27/32       121/32       11/8         1½ x 1¼ x 3/4       1.164       31/32       15/8       17/8         1½ x 1¼ x 1       1.105       7/8       11/9/32       15/8         1½ x 1¼ x 1¼       1.160       15/16       19/16       11/9/32         1½ x 1½ x 1/2       .639       3/8       3/8       1/8         1½ x 1½ x 3/4       .740       19/32       19/32       13/32         1½ x 1½ x 1       .785       11/16       11/16       13/16         1½ x 1½ x 1       .785       11/16       11/16       13/16         1½ x 1½ x 1¼       1.262       7/8       7/8       11/9/32         2       1.771       11/3/32       21/2       17/16         1½ x 1½ x 1¼       1.262       7/8       7/8       11/9/32         2 x 1/2 x 2       1.663       11/3/32       21/2       17/16         2 x 1 x 1       1.764       11/3/32       21/2       17/16         2 x 1½ x 3/4       1.471       111/32       21/3	1½ x 1/2 x 1½	1.263 <sup>29</sup> / <sub>32</sub> 1 <sup>29</sup> / <sub>32</sub> 1
1½ x 1 x 1       1.105       1³/16       11¹/16       11³/32       1¹/8         1½ x 1 x 1½       1.146       2²/32       1²/32       1¹/8         1½ x 1¼ x 3/4       1.164       3¹/32       1⁵/8       1²/8         1½ x 1¼ x 1       1.105       ¬²/8       1¹¹9/32       1⁵/8         1½ x 1¼ x 1¼       1.160       ¹⁵/16       1¹/16       1¹/9         1½ x 1½ x 1/2       .639       ³/8       ³/8       1¹/8         1½ x 1½ x 3/4       .740       ¹³/32       ¹³/32       1³/32         1½ x 1½ x 1¼       1.262       ¬²/8       ¬¹/8       1¹³/32         1½ x 1½ x 1¼       1.262       ¬²/8       ¬¹/8       1¹³/32         2       1.771       1¹³/32       1¹³/32       1³/32         2 x 1/2 x 1½       1.663       1¹³/32       2¹/2       1²/16         2 x 1 x 1       1.764       1¹³/32       2¹/4       2³/32         2 x 1 x 2       1.564       1¹³/32       2¹/4       2³/32         2 x 1½ x 3/4       1.542       1¹¹/32       2¹/16       2¹/8         2 x 1½ x 1½       1.542       1¹¹/32       2¹/16       2¹/8         2 x 1½ x 1½       1.542       1¹¹/32 <td>1½ x 3/4 x 3/4</td> <td>1.101 <sup>29</sup>/<sub>32</sub> 1<sup>13</sup>/<sub>16</sub> 1<sup>3</sup>/<sub>4</sub></td>	1½ x 3/4 x 3/4	1.101 <sup>29</sup> / <sub>32</sub> 1 <sup>13</sup> / <sub>16</sub> 1 <sup>3</sup> / <sub>4</sub>
1½ x 1 x 1½       1.146       27/32       121/32       11/8         1½ x 1¼ x 3/4       1.164       31/32       15/8       17/8         1½ x 1¼ x 1       1.105       7/8       119/32       15/8         1½ x 1½ x 1½       1.160       15/16       19/16       119/32         1½ x 1½ x 1/2       .639       3/8       3/8       1/8       1/9         1½ x 1½ x 3/4       .740       19/32       19/32       13/32         1½ x 1½ x 1¼       1.262       7/8       7/8       11/16       13/16         1½ x 1½ x 1¼       1.262       7/8       7/8       119/32       13/32         2 x 1½ x 1½       1.33       113/32       113/32       113/32         2 x 1½ x 1½       1.663       113/32       21/2       17/16         2 x 1 x 2       1.663       113/32       21/4       27/32         2 x 1½ x 3/4       1.542       111/32       21/16       21/8         2 x 1½ x 3/4       1.542       111/32       21/9/32       21/4         2 x 1½ x 1½       1.543       13/8       129/32       21/4         2 x 1½ x 1½       1.546       13/8       129/32       21/4         2 x 1½ x 1½	1½ x 1 x 3/4	1.217 15/16 13/4 113/16
1½ x 1¼ x 3/4       1.164       3¹/32       1⁵/8       1²/8         1½ x 1¼ x 1¼       1.105       ⁻/8       1¹¹/32       1⁵/8         1½ x 1¼ x 1¼       1.160       ¹⁵/16       1³/16       1¹³/32         1½ x 1½ x 1/2       .639       ³/8       ³/8       1¹/8         1½ x 1½ x 3/4       .740       ¹³/32       ¹³/32       1³/32         1½ x 1½ x 1¼       .785       ¹¹/16       ¹³/16       1³/16         1½ x 1½ x 1¼       1.262       ⁻/8       ⁻/8       1³/32       1³/32         2       1.771       1¹³/32       1¹³/32       1³/32       1³/32         2 x 1/2 x 2       1.663       1¹³/32       2¹/4       2⁻/32         2 x 1 x 1       1.764       1¹³/32       2¹/4       2⁻/32         2 x 1½ x 3/4       1.471       1¹¹/32       2¹/4       2⁻/8         2 x 1½ x 3/4       1.542       1¹¹/32       2¹/4       2⁻/8         2 x 1½ x 3/4       1.542       1¹¹/32       2¹/4       2⁻/8         2 x 1½ x 1½       1.546       1³/8       1²²/32       2¹/4         2 x 1½ x 1½       1.546       1³/8       1²²/32       2¹/4         2 x 1½ x 1½       1.576	1½ x 1 x 1	1.105 13/16 111/16 119/32
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1½ x 1 x 1½	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1½ x 1¼ x 3/4	1.164 <sup>31</sup> / <sub>32</sub> 1 <sup>5</sup> / <sub>8</sub> 1 <sup>7</sup> / <sub>8</sub>
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1½ x 1¼ x 1	1.105 <sup>7</sup> / <sub>8</sub> 1 <sup>19</sup> / <sub>32</sub> 1 <sup>5</sup> / <sub>8</sub>
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1½ x 1¼ x 1¼	
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 x 1 x 1	1.764 113/32 21/4 27/32
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 x 1 x 2	1.564 1 <sup>13</sup> / <sub>32</sub> 2 <sup>5</sup> / <sub>32</sub> 1 <sup>13</sup> / <sub>32</sub>
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 x 1¼ x 1¼	1.471 111/32 21/16 21/8
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 x 1½ x 3/4	1.542 111/32 129/32 21/4
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 x 1½ x 1	1.546 1 <sup>3</sup> / <sub>8</sub> 1 <sup>29</sup> / <sub>32</sub> 2 <sup>1</sup> / <sub>4</sub>
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 x 1½ x 1¼	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 x 1½ x 1½	1.670 1 <sup>1</sup> / <sub>8</sub> 1 <sup>9</sup> / <sub>16</sub> 1 <sup>13</sup> / <sub>32</sub>
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 x 1½ x 2	1.787 1 <sup>5</sup> / <sub>32</sub> 1 <sup>11</sup> / <sub>16</sub> 1 <sup>1</sup> / <sub>2</sub>
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 x 2 x 1/2	1.576 1 <sup>3</sup> / <sub>8</sub> 1 <sup>3</sup> / <sub>8</sub> 2 <sup>7</sup> / <sub>16</sub>
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 x 2 x 3/4	1.256 3/4 3/4 11/2
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2 x 2 x 1	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2½ x 3/4 x 2½	
2½ x 1¼ x 2½       2.081 12¹/32 2¹⁻/32 1¹³/16         2½ x 1½ x 2½       2.973 12⁵/32 2⁻/16 1⁻/8		
2½ x 1½ x 2½ 2.973 1 <sup>25</sup> / <sub>32</sub> 2 <sup>7</sup> / <sub>16</sub> 1 <sup>7</sup> / <sub>8</sub>		
	2½ x 1½ x 2	

NOM. SIZE	APPROX. NET WT. LBS.	DI C	MENSIO INCHES	INS G
2½ x 2 x 3/4		34 1 <sup>13</sup> / <sub>1</sub>	. 131/	
2½ x 2 x 3/4		07 1 <sup>27</sup> /3		
2½ x 2 x 1¼		54 1 <sup>11</sup> / <sub>1</sub>		219/32
2½ x 2 x 1½		76 1 <sup>23</sup> /3		$\frac{2^{15}/32}{2^{15}/32}$
2½ 2 x 2		46 1 <sup>13</sup> /1		
2½ x 2 x 3		80 2 <sup>17</sup> /3		
2½ x 2 x 2½		50 1 <sup>13</sup> /1		
2½ x 2½ x 1/2		17 1 <sup>21</sup> / <sub>3</sub>		
2½ x 2½ x 3/4		17 1 /3 111 1 <sup>9</sup> /16		
2½ x 2½ x 1		44 1 <sup>1</sup> / <sub>2</sub>		
2½ x 2½ x 1¼		75 1 <sup>21</sup> /3		
2½ x 2½ x 1½		66 1 <sup>27</sup> /3		
2½ x 2½ x 2		57 1 <sup>25</sup> /3		
3		22 1 <sup>15</sup> / <sub>1</sub>		
3 x 3/4 x 3		49 1 <sup>7</sup> /8		
3 x 1 x 3		43 17/8		
3 x 1¼ x 3		86 1 <sup>7</sup> /8		
3 x 1½ x 3			2 225/32	
3 x 2 x 2		29 1 <sup>31</sup> / <sub>3</sub>		
3 x 2 x 2½	3.7		$2^{21/32}$	
3 x 2 x 3			2 <sup>21</sup> / <sub>32</sub>	
3 x 2½ x 2	3.0		27/16	
3 x 2½ x 2½		10 113/1		
3 x 2½ x 3		94 1 <sup>13</sup> / <sub>1</sub>		
3 x 3 x 1/2	2.3		17/8	
3 x 3 x 3/4			11/2	
3 x 3 x 1	2.3	17 1 <sup>1</sup> / <sub>2</sub>	11/2	23/4
3 x 3 x 11/4	2.9	57 1 <sup>7</sup> /8	1 <sup>7</sup> /8	215/16
3 x 3 x 1½	3.0	56 1 <sup>7</sup> /8	1 <sup>7</sup> /8	213/16
3 x 3 x 2	3.145	1 <sup>7</sup> /8	1 <sup>7</sup> /8	211/16
3 x 3 x 2½	3.034	1 <sup>15</sup> /16	1 <sup>15</sup> / <sub>16</sub>	21/2
4	7.169	$2^{13}/_{32}$	$2^{13}/_{32}$	217/32
4 x 2 x 4	7.069	23/8		
4 x 2½ x 4	6.984	23/8	$3^{25}/_{32}$	223/32
4 x 3 x 2	6.965	23/8	39/16	$3^{25}/_{32}$
4 x 3 x 2½	6.990	23/8		3 <sup>29</sup> / <sub>32</sub>
4 x 3 x 3	7.085	23/8	39/16	
4 x 3 x 4	6.993	23/8	3 <sup>23</sup> / <sub>32</sub>	
4 x 4 x 1/2	4.328	111/32		311/32
4 x 4 x 3/4	4.415	111/32	111/32	35/16
4 x 4 x 1	4.414	111/32	111/32	
4 x 4 x 1¼	4.730	1 <sup>7</sup> /16	1 <sup>7</sup> / <sub>16</sub>	33/32
4 x 4 x 1½	7.144	211/32	211/32	
4 x 4 x 2	7.094	211/32	211/32	313/16
4 x 4 x 2½	6.925	23/8	23/8	329/32
4 x 4 x 3	7.083	23/8	23/8	31/2

#### TEES (Cont.)



Tee P x P x F – Wrot

	APPROX NET WT		MENSIO INCHES	
NOM. SIZE	LBS.	E	F	G
1/2	.257	131/32	23/32	23/32
3/4	.434	211/32	<sup>25</sup> / <sub>32</sub>	<sup>25</sup> / <sub>32</sub>
3/4 x 3/4 x 1/4	.385	<sup>23</sup> / <sub>32</sub>	<sup>23</sup> / <sub>32</sub>	21/32
3/4 x 3/4 x 1/2	.258	$2^{5}/_{32}$	21/32	21/32
1 x 1 x 1/2	.393	21/4	21/32	21/32
1 x 1 x 3/4	.516	2 <sup>27</sup> /32	21/32	21/32
1¼ x 1¼ x 1/2	.494	$2^{13}/_{32}$	5/8	5/8
1¼ x 1¼ x 3/4	.679	$2^{5}/8$	<sup>11</sup> / <sub>16</sub>	<sup>11</sup> / <sub>16</sub>
1½ x 1½ x 1/2	.733	211/16	3/8	3/8
1½ x 1½ x 3/4	.885	27/8	19/32	19/32
2 x 2 x 1/2	1.699	$3^{27}/_{32}$	$1^{3}/_{8}$	$1^{3}/_{8}$
2 x 2 x 3/4	1.370	33/16	$^{3}/_{4}$	3/4
2½ x 2½ x 3/4	1.049	$2^{15}/_{32}$	11/16	<sup>11</sup> / <sub>16</sub>
2½ x 2½ x 2	1.925	$3^{7}/_{32}$	$1^9/_{32}$	$1^9/_{32}$
3 x 3 x 3/4	1.435	$2^{3}/_{4}$	11/16	<sup>11</sup> / <sub>16</sub>
3 x 3 x 2	2.097	$3^{15}/_{32}$		$^{21}/_{32}$
4 x 4 x 3/4	2.786	$3^{1}/_{4}$	11/16	<sup>11</sup> / <sub>16</sub>
4 x 4 x 2	3.675	4	$1^9/_{32}$	$1^9/_{32}$

#### **UNIONS**

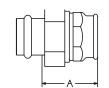


Union P x P – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
1/2	.383	1 <sup>5</sup> / <sub>16</sub>
3/4	.527	19/32
1	.804	111/32
11/4	1.107	119/32
1½	1.703	1 <sup>21</sup> / <sub>32</sub>
2	2.368	1 <sup>27</sup> / <sub>32</sub>

#### UNIONS (Cont.)

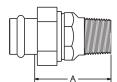




PC633-3 🔨 Union P x F – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
1/2	.374	17/16
3/4	.527	117/32
1	.841	1 <sup>5</sup> /8
11/4	1.178	1 <sup>15</sup> / <sub>16</sub>
1½	1.610	$1^{29}/_{32}$
2	2.445	25/32

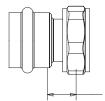




PC633-4 1 Union P x M – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
1/2	.386	1 <sup>13</sup> / <sub>16</sub>
3/4	.567	1 <sup>29</sup> / <sub>32</sub>
1	.842	25/32
11⁄4	1.316	23/8
1½	1.756	$2^{13}/_{32}$
2	2.789	23/4





PC634 🔨 Tailpiece P x F BSP

NOM. SIZE	approx. Net Wt./LBS.	DIM. A INCHES	
1/2 X 1	0.1840	15/32	
3/4 X 1	0.2230	15/32	
1 X 1	0.2320	21/32	
1 X 1¼	0.3530	3/8	

#### **ACCESSORIES**



#### **EPDM Seal (leak detection)**

SIZE	PART No.	
1/2	T048352 PP	Leak Detect
3/4	T048354 PP	Leak Detect
1	T048356 PP	Leak Detect
11/4	T048358 PP	Leak Detect
1½	T048360 PP	Leak Detect
2	T048362 PP	Leak Detect

NOTE: Do NOT use with PC-FP600A-LF



#### Large Diameter EPDM Seal (leak detection)

SIZE	PART No.	
2½	T048364 PP	Leak Detect
3	T048366 PP	Leak Detect
4	T048368 PP	Leak Detect



#### **EPDM Seal (leak detection** for PC-FP600A-LF ONLY)

SIZE	PART No.	
1/2	T048370 PP	PC-FP600A-LF
3/4	T048372 PP	PC-FP600A-LF
1	T048374 PP	PC-FP600A-LF
11⁄4	T048376 PP	PC-FP600A-LF
1½	T048378 PP	PC-FP600A-LF
2	T048380 PP	PC-FP600A-LF



#### Press Installation Gauge

SIZE	PART No.	
1½ - 2	K700001PC	_

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.

Visit our website for the most current information.

LEAD-FREE: Weighted average lead content ≤ 0.25%



# NIBCO pressystem Valves





# **NIBCO®** Press System Illustrated Valve Index

#### PC-585HP-LF and PC-585HP-66-LF

Lead-Free Bronze Ball Valve



**NIBCO** 

- Two-piece Body
  - Full Port, 250 psi CWP
- Copper Press End w/ Leak Detection
- Reversible Handle, Triple-sealed Stem
- Sizes 1/2" thru 4"

Page 14, 15

#### TPC-585HP-LF

Lead-Free Bronze Ball Valve



- Two-piece Body
- Full Port, 250 psi CWP
- Copper Press End x Threaded
- Reversible Handle, Triple-sealed Stem
- Sizes 1/2" thru 2"

Page 16

#### PC-585HP-LF-HC

Lead-Free Bronze Ball Valve



- Copper Press End with Hose Cap Reversible Handle, Triple-Sealed stem
- Sizes 1/2" and 3/4"

Page 17

#### PC-585-70 and PC-585-70-66

Bronze Ball Valve



- Press x Press Female End
  - · Full Port, Blowout-Proof Stem
  - Standard Lever Handle
  - 250 psi CWP
  - Sizes 1/2" thru 2"

Page 18, 19

#### TPC-585-70 and TPC-585-70-66

Bronze Ball Valve



- Press Female End x NPT
- Full Port, Blowout-Proof Stem
- Standard Lever Handle
- 250 psi CWP
- Sizes 1/2" thru 2"

Page 20, 21

#### PC-585-70-HC and PC-585-70-66-HC

Bronze Ball Valve



- Press Female Fnd x Hose
- Full Port, Blowout-Proof Stem
- Standard Lever Handle · Blow Down, End of Line
- Hose Cap with Chain
- 250 psi CWP
   Sizes 1/2" and 3/4"

Page 22, 23

#### PC-585-80-LF and PC-585-66-LF

Lead-Free Bronze Ball Valve



- Press x Press Female End
  - Full Port, Blowout-Proof Stem
  - Standard Lever Handle
  - 250 psi CWP Sizes 1/2" thru 3"

Page 24, 25

#### PC-585-80-LF-HC and PC-585-66-LF-HC

Lead-Free Bronze Ball Valve



- Press Female End x Hose
- Full Port, Blowout-Proof Stem
- Standard Lever Handle
- 250 psi CWP
- Sizes 1/2" and 3/4"

Page 26, 27

#### TPC-585-80-LF and TPC-585-66-LF

Lead-Free Bronze Ball Valve



- Press Female End x NPT
- Full Port, Blowout-Proof Stem
- 250 psi CWP
- Sizes 1/2" thru 2"

Page 28, 29

#### PC-585-80-LF-SR and PC-585-80-LF-HC-SR

Lead-Free Bronze Ball Valve



- · Press x Press
- HC: Press x Hose
- · Full Port, Blowout-Proof Stem
- 250 psi CWP
- Sizes 1/2" thru 2"
- HC: Sizes 1/2" and 3/4"

Page 30, 31

#### PC-595-Y/R-LF and PC-595-Y/R-66-LF

Lead-Free Bronze Ball Valve



- Three-piece Body
- Full Port, Blowout-Proof Stem
- Standard and SS Trim
- · Press End Leak Detection
- 250 psi CWP • Sizes 1/2" thru 21/2"

Page 32, 33

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

Lead-Free DZR Brass Ball Valve



- Press x Press Female End
- Full Port, Blowout-Proof Stem
- · Press End Leak Detection
- 250 psi CWP Sizes 1/2" thru 4"

Page 34, 35

#### PC-FP-600A-LF-W

Lead-Free DZR Brass Ball Valve



- Press x Press with Wing Handle
- Press End Leak Detection
- Full Port, Blowout-Proof Stem
- 250 psi
- Sizes 1/2" 1"

Page 36

#### PCMT-FP-600A-LF

Lead-Free DZR Brass Ball Valve



- Press x MIP
- Press End Leak Detection
- Full Port, Blowout-Proof Stem
- 250 psi
- Sizes 1/2" 1"

Page 37

#### PCT-FP-600A-LF

Lead-Free DZR Brass Ball Valve



- Press x FIP Press End Leak Detection
- Full Port, Blowout-Proof Stem
- 250 psi • Sizes 1/2" - 1"

Page 38

PC-FP-600A-D-LF Lead-Free DZR Brass Ball Valve

- Press x Press with Drain/Bleeder Press End Leak Detection
- Full Port, Blowout-Proof Stem
- 250 psi Sizes 1/2" - 1"

Page 39

#### PC-FP-600A-LF-HC

Lead-Free DZR Brass Ball Valve



- Press x Hose Cap
- Press End Leak Detection · Full Port, Blowout-Proof Stem

• 250 psi • Sizes 1/2" - 3/4" Page 40

#### PCPXA-FP-600A-LF

Lead-Free DZR Brass Ball Valve



- Press x PEX F1960 Cold Expansion Press End Leak Detection
- Full Port, Blowout-Proof Stem • 250 psi
- Sizes 1/2" 2"

Page 41

NOTE: Ball valves are down-rated from 600 psi CWP to 250 psi CWP to match the press system.

Visit our website for the most current information.

LEAD-FREE: Weighted average lead content ≤ 0.25%



# **NIBCO®** Press System Illustrated Valve Index

# PCPX-FP-600A-LF Lead-Free DZR Brass Ball Valve

- Press x PEX F1807 Crimp
  - Press End Leak Detection
  - Full Port, Blowout-proof Stem
  - 250 psi
  - Sizes 1/2" 2"

Page 42



#### PCFU-FP-600A-LF

Lead-Free DZR Brass Ball Valve

- Press x FIP Union
- Press End Leak Detection
- Full Port, Blowout-proof Stem
- 250 psi
- Sizes 1/2" 1"

Page 43



- Press x MIP Union
- Press End Leak Detection
- Full Port, Blowout-proof Stem
- 250 psi

PCMU-FP-600A-LF

Sizes 1/2" thru 1"

Page 44

#### PCSU-FP-600A-LF

Lead-Free DZR Brass Ball Valve



- Press x Solder Union
  - Press End Leak Detection
- Full Port, Blowout-Proof Stem
- 250 psi
- Sizes 1/2" thru 1"

Page 45

#### PCU-FP600A-LF

Lead-Free DXR Brass Press Union Ball Valve



- Press x Press Union
- Press End Leak Detection
- Full Port, Blowout-Proof Stem
- 250 psi
- Sizes 1/2" thru 1"

Page 46

#### PC-FP600A-S-LF

Lead-Free DZR Brass Press Slip Ball Valve



- Press End Leak Detection
- Full Port, Blowout-Proof Stem
- 250 psi
- Sizes 1/2" thru 1"

Page 47

#### PC-FP485-LF

Lead-Free DZR Brass Press Ball & Check Valve



- All-in-one Ball & Check (Press x Press)
  - Press End Leak Detection
  - Full Port, Blowout-Proof Stem
  - 250 psi
  - Sizes 1/2" thru 1 1/2"

Page 48

#### PF-111 and PC-111-LF

Bronze and Lead-Free Bronze Gate Valve



- Press x Press Female End
- Rising Stem
- Press End Leak Detection
- 250 psi CWP
- Sizes 1/2" thru 2" (PF-113)
- Sizes 1/2" thru 3"
- Page 49, 50



PF-113 and PC-113-LF Bronze and Lead-Free Bronze Gate Valve

- Press x Press Female End • Non-Rising Stem
  - Press End Leak Detection
  - 250 psi CWP
  - Sizes 1/2" thru 2" (PF-113)
  - Sizes 1/2" thru 3" (PC-113-LF)

#### PF-211-Y

Bronze Globe Valve



- Press x Press Female End
- PTFE Resilient Seat
- 200 psi CWP
- Sizes 1/2" thru 2"

Page 53



- Press x Press Female End
- PTFE Resilient Seat
- 200 psi CWP
- Sizes 1/2" thru 2"

Page 54

#### PC-413-Y-LF

Bronze Swing Check Valve



- Lead-Free
- Press x Press Female End
- PTFE Seat
- 200 psi CWP • Sizes 1/2" thru 2"

Page 55

PF-413-Y



- Bronze Swing Check Valve
  - · Press x Press Female End
  - PTFE Seat
  - 200 psi CWP Sizes 1/2" thru 2"

Page 57

#### PF-480-Y

Bronze In-Line Check Valve



- Press x Press Female End
- PTFE Seat, Stainless Internals
- 200 psi CWP Sizes 1/2" thru 2"

Page 58

PFD-2000 Series Ductile Iron Butterfly Valve



- Press x Press Female End
  - Molded-in Liner
- Aluminum Bronze Disc
- Standard Lever Handle or Gear Operated
- 200 psi CWP • Sizes 2 1/2" thru 4"

Page 59

#### PS-585-70

PS-585-70-66 Bronze Ball Valve



- Press x Press Male End
- 2" Type L Copper Full Port, Blowout-Proof Stem Standard Lever Handle

• Sizes 1/2" thru 2" Page 60, 61

• 600 psi CWP

#### PS-585-70-HC

Bronze Ball Valve



- Press Male x Hose End
- 2" Type L Copper • Full Port, Blowout-Proof Stem
- Standard Lever Handle
- · Blown Down, End of Line Hose Cap with Chain
- 600 psi CWP Sizes 1/2" and 3/4" Page 62



#### PF-221/222-A/B

Bronze Y-Strainer



- Tapped cap w/ blow-off plug or solid cap • 20 Mesh SS Screen or
- SS Perforated Screen
- 200 psi CWP • Sizes 1/2" thru 2"

Page 63

NOTE: Ball valves are down-rated from 600 psi CWP to 250 psi CWP to match the press system. NOTE: Check valves are down-rated from 250 psi CWP to 200 psi CWP to match the press system.

LEAD-FREE: Weighted average lead content ≤ 0.25%



# NIBCO® 585HP Lead-Free Bronze Ball Valves

**Features:** Silicon Performance Bronze<sup>®</sup> 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/CAN 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")

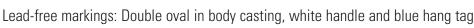
United States Patent No. 10,234,043 & United States Patent No. 11,131,403











#### **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.	Press End Seal (2)	EPDM - Leak Detection
8.	Boss Seal O-ring (2)	EPDM
9.	Body	ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting
10.	Seats (2)	Reinforced PTFE
11.	Ball	ASTM B584 C46500 DZR Lead-free Brass (½" - 1") ASTM A276 S31600 or A351 CF8M Stainless Steel (1¼" -4")
12.	Body End Piece	ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting
13.	Press End Adapter (2)	ASTM B75 Alloy C12200 Wrot Copper
14.	Handle	Carbon Steel, GEOMET® Coated, Plastisol Grip



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

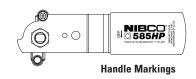
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#### **Handle Options:**

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

#### **DIMENSIONS - WEIGHTS**

Size		١	E	3	(	C		)		E				G	Wei	ghts
In.	In.	mm.	ln.	mm.	ln.	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

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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.

Visit our website for the most current information.

LEAD-FREE: Weighted average lead content ≤ 0.25%



## NIBCO® 585HP Lead-Free Bronze Ball Valves

**Features:** Silicon Performance Bronze<sup>®</sup> 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/CAN 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







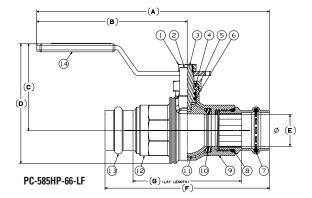


Lead-free markings: Double oval in body casting, white handle and blue hang tag

#### **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 0-ring (2)	Qmonix® EPDM
7.	Crimp Evident Seal (2)	EPDM - Leak Detection
8.	Boss Seal O-ring (2)	EPDM
9.	Body	ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting
10.	Seats (2)	Reinforced PTFE
11.	Ball	ASTM A276 S31600 or A351 CF8M Stainless Steel
12.	Body End Piece	ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting
13.	Press End Adapter (2)	ASTM B75 Alloy C12200 Wrot Copper
14.	Handle	Carbon Steel, GEOMET® Coated, Plastisol Grip





#### **Handle Options:**

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

#### **DIMENSIONS - WEIGHTS**

Size	A		B		C			D		E		F		G		Weights	
In.	In.	mm.	ln.	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.

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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%

QMONIX® is a trademark of Quadion LLC

United States Patent No. 10,234,043 &

United States Patent No. 11,131,403



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# NIBCO® 585HP Lead-Free Bronze Ball Valves

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

**Approvals:** MSS-SP110/145 • IAPMO/ANSI Z1157 • NSF/ANSI/CAN 61-8 Commercial Hot 180° F • NSF/ANSI/CAN 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\*

NSF/ANSI/CAN 61 & 372
IAPMO/ANSI Z1157

ICC
125%



1558

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

#### **MATERIAL LIST**

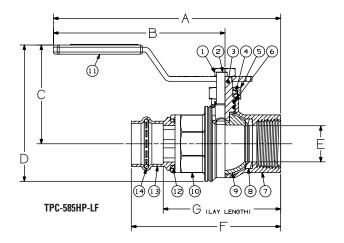
	PART	SPECIFICATION
1.	Handle Nut	Carbon Steel, GEOMET® Coated
2.	Handle Stop	ASTM A276 S31600 Stainless Steel
3.	Stem	ASTM C69300 Lead-free Silicon Bronze ASTM A276 316 Stainless Steel
4.	Packing	PTFE
5.	Packing Nut	ASTM B16 C36000 Brass
6.	Stem O-ring (2)	Qmonix® EPDM
7.	Crimp Evident Seal	EPDM - Leak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



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

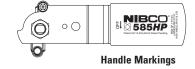
#### **Handle Options:**

- NIB-SEAL<sup>®</sup>
- Locking Lever
- Extended Lever w/ Memory Stop



#### **DIMENSIONS - WEIGHTS**

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



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

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

 $\mathbf{QMONIX}^{\text{(8)}}$  is a trademark of Quadion LLC

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Visit our website for the most current information.

LEAD-FREE: Weighted average lead content ≤ 0.25%



## NIBCO® 585HP Lead-Free Bronze Ball Valves

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

**Approvals:** MSS SP-110/145 ● NSF/ANSI/CAN 61-8 & 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

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





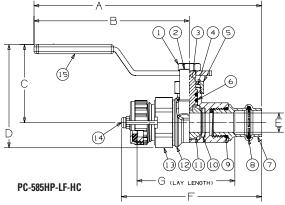


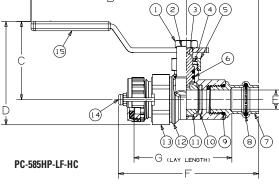
#### **MATERIAL LIST**

	PART	SPECIFICATION
1.	Handle Nut	Carbon Steel, GEOMET® Coated
2.	Handle Stop	ASTM A276 S31600 Stainless Steel
3.	Stem	ASTM 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 - Leak Detection
9.	Boss Seal O-ring	EPDM
10.	Seats (2)	Reinforced PTFE
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 Casting
13.	Body End Piece	ASTM B371 C69300 DZR Lead-free Silicon Brass
14.	Hose Cap Assembly <sup>1</sup>	Die Cast Brass, EPDM Gasket, Soft PVC Retainer
15.	Handle	Carbon Steel, GEOMET® Coated, Plastisol Grip



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





#### **DIMENSIONS - WEIGHTS**

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

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

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

Visit our website for the most current information.

**Handle Markings** 



# NIBCO® Press System Bronze Ball Valves

Two-Piece Body • Full Port • Bronze Trim • Blowout-Proof Stem • Press Ends Leak Detection



250 psi/17.2 bar non-shock cold working pressure Maximum Pressure/Temperature: 200 psi at 250°F

CONFORMS TO MSS SP-110

#### **MATERIAL LIST**

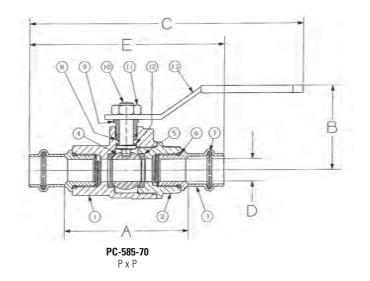
IVIAI ENIAL LIST											
PART	SPECIFICATION										
Body	Bronze ASTM B584 Alloy C84400										
Body End	Bronze ASTM B584 Alloy C84400										
Press End Adapter (2)	Wrot Copper ASTM B75 Alloy C12200										
Ball	Brass ASTM B16 Alloy C36000										
	or ASTM B283 Alloy C37700 (Chrome/Nickel Plated)										
Seat Ring (2)	Reinforced PTFE										
Boss seal o-ring (2)	EPDM										
Crimp Evident Seal (2)	EPDM - Leak Detection										
Packing	PTFE										
Pack Gland	Brass ASTM B16 Alloy C36000										
Stem	Silicon Bronze ASTM B371 Alloy C69430										
	or ASTM B371 ALLOY C69300										
Handle Nut	Zinc Plated Steel										
Thrust Washer	Reinforced PTFE										
Handle Assembly	Zinc Plated Steel Clear Chromate Plastisol Coated										
	PART  Body  Body End  Press End Adapter (2)  Ball  Seat Ring (2)  Boss seal o-ring (2)  Crimp Evident Seal (2)  Packing  Pack Gland  Stem  Handle Nut  Thrust Washer										



PC-585-70 Press x Press Female End

#### **Handle Options:**

- Stainless steel lever
- NIB-SEAL®
- · Locking lever
- · Stainless steel locking lever
- · Memory stop
- Extended lever w/ memory stop
- Round
- Wing
- Horizontal and vertical chain



#### **DIMENSIONS—WEIGHTS**

Dimensions												_	
SIZE		A		B			C		D		E	Weight	
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
1/2"	13	2.76	70	1.90	48	6.00	152	.50	13	4.15	105	.80	.36
3/4"	19	3.28	83	2.28	58	7.29	185	.75	19	5.05	128	1.56	.71
1"	25	3.59	91	2.41	61	7.34	186	1.00	25	5.36	136	2.13	1.00
1¼"	32	4.62	117	3.05	77	10.04	255	1.25	32	6.64	169	3.73	1.69
1½"	38	5.23	133	3.30	84	10.72	272	1.50	38	8.00	203	5.53	2.51
2"	50	5.63	143	3.51	89	11.05	281	2.00	50	8.65	220	7.95	3.61

NIBCO Press end ball valves are designed to MSS SP-110 with the exception of Press connections are designed to MSS SP-145. Valves with Press ends are rated to align with NIBCO Press System max pressure.



**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 Bronze Ball Valves

Two-Piece Body • Full Port • Stainless Trim • Blowout-Proof Stem • Vented Ball • Press Ends Leak Detection



# 250 psi/17.2 bar non-shock cold working pressure Maximum Pressure/Temperature: 200 psi at 250°F

CONFORMS TO MSS SP-110

#### **MATERIAL LIST**

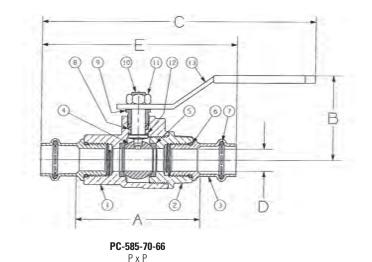
	IVIA	II LIIIAL LIGI
	PART	SPECIFICATION
1.	Body	Bronze ASTM B584 Alloy C84400
2.	Body End	Bronze ASTM B584 Alloy C84400
3.	Press End Adapter (2)	Wrot Copper ASTM B75 Alloy C12200
4.	Ball (vented)	Stainless Steel ASTM A276 Type 316 or
		ASTM A351 Type CF8M
5.	Seat Ring (2)	Reinforced PTFE
6.	Boss Seal O-Ring (2)	EPDM
7.	Crimp Evident Seal (2)	EPDM - Leak Detection
8.	Packing	PTFE
9.	Pack Gland	Brass ASTM B16 Alloy C36000
10.	Stem	Stainless Steel ASTM A276 Alloy S31600
11.	Handle Nut	300 Series Stainless Steel
12.	Thrust Washer	Reinforced PTFE
13.	Handle Assembly	Zinc Plated Steel Clear Chromate Plastisol Coated



- Stainless steel lever
- NIB-SEAL®
- Locking lever
- Stainless steel locking lever
- Memory stop
- Extended lever w/ memory stop
- Round
- Wing
- Horizontal and vertical chain



PC-585-70-66
Press x Press
Female End



#### **DIMENSIONS—WEIGHTS**

Dimensions												_	
SI	SIZE		Α		B		C		D		E	Weight	
ln.	mm.	In.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	In.	mm.	Lbs.	Kg.
1/2"	13	2.76	70	1.90	48	6.00	152	.50	13	4.15	105	.77	.35
3/4"	19	3.28	83	2.28	58	7.29	185	.75	19	5.05	128	1.55	.70
1"	25	3.59	91	2.40	61	7.34	186	1.00	25	5.36	136	2.29	1.04
1¼"	32	4.62	117	3.05	77	10.04	255	1.25	32	6.64	169	3.80	1.72
1½"	38	5.23	133	3.30	84	10.72	272	1.50	38	8.00	203	5.60	2.54
2"	50	5.63	143	3.51	89	11.05	281	2.00	50	8.65	220	8.69	3.94

NIBCO Press end ball valves are designed to MSS SP-110 with the exception of Press connections are designed to MSS SP-145. Valves with Press ends are rated to align with NIBCO Press System max pressure.



**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 Bronze Ball Valves

Two-Piece Body • Full Port • Bronze Trim • Blowout-Proof Stem • Press Ends Leak Detection





250 psi/17.2 bar non-shock cold working pressure Maximum Pressure/Temperature: 200 psi at 250°F

CONFORMS TO MSS SP-110

#### **MATERIAL LIST**

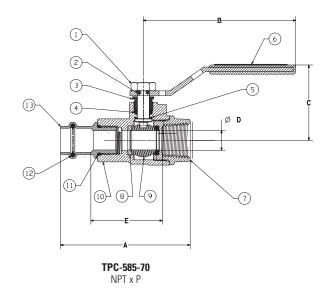
	141	ATEMAL LIGI
	PART	SPECIFICATION
1.	Handle Nut	Zinc Plated Steel
2.	Stem	Silicon Bronze ASTM B371 Alloy C69300
		or ASTM B371 Alloy C69430
3.	Pack Gland	Brass ASTM B16 Alloy C36000
4.	Packing, Stem	PTFE
5.	Thrust Washer	Reinforced PTFE
6.	Handle Assembly	Zinc Plated Steel with Plastisol Coating
7.	Body End	Bronze ASTM B584 Alloy C84400
8.	Seat Ring (2)	Reinforced PTFE
9.	Ball	Brass ASTM B16 Alloy C36000
		or ASTM B283 Alloy C37700 (Chrome/Nickel Plated)
10.	Body	Bronze ASTM B584 Alloy C84400
11.	Boss seal o-ring	EPDM
12.	Crimp Evident Seal	EPDM - Leak Detection
13.	Press End Adapter	Wrot Copper ASTM B75 Alloy C12200



TPC-585-70
Thread x Press
Female

#### Handle Options:

- Stainless steel lever
- NIB-SEAL®
- Locking lever
- Stainless steel locking lever
- · Memory stop
- Extended lever w/ memory stop
- Round
- Wing
- Horizontal and vertical chain



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

Dimensions														
SI	SIZE		A		B		C		D		E		ight	Master
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	Ctn. Qty.
1/2"	15	3.38	86	3.96	101	1.96	50	0.50	13	1.86	47	0.85	0.39	50
3/4"	20	4.08	104	4.76	121	2.28	58	0.75	19	2.42	61	1.50	0.68	30
1″	25	4.44	113	4.76	121	2.48	63	1.00	25	2.71	69	2.00	0.91	20
1¼"	32	5.46	139	6.75	171	3.09	78	1.25	32	3.67	93	3.55	1.61	12
1½"	40	6.27	159	6.75	171	3.32	84	1.50	38	4.15	105	4.90	2.22	6
2"	50	6.99	176	6.75	171	3.56	90	2.00	51	4.64	118	6.90	3.13	6

NIBCO Press end ball valves are designed to MSS SP-110 with the exception of Press connections are designed to MSS SP-145. Valves with Press ends are rated to align with NIBCO Press System max pressure.



**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 Bronze Ball Valves

Two-Piece Body • Full Port • Stainless Trim • Blowout-Proof Stem • Vented Ball • Press Ends Leak Detection





# 250 psi/17.2 bar non-shock cold working pressure Maximum Pressure/Temperature: 200 psi at 250°F

CONFORMS TO MSS SP-110

#### **MATERIAL LIST**

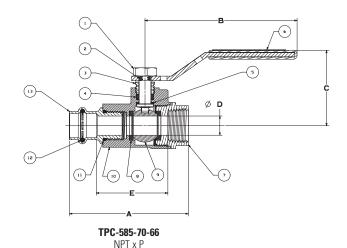
	IVI	AI ENIAL LIÐ I
	PART	SPECIFICATION
1.	Handle Nut	300 Series Stainless Steel
2.	Stem	Stainless Steel ASTM A276 Type 316
3.	Pack Gland	Brass ASTM B16 Alloy C36000
4.	Packing, Stem	PTFE
5.	Thrust Washer	Reinforced PTFE
6.	Handle Assembly	Zinc Plated Steel Clear Chromate
		Plastisol Coated
7.	Body End	Bronze ASTM B584 Alloy C84400
8.	Seat Ring (2)	Reinforced PTFE
9.		Stainless Steel ASTM A276 Alloy S31600 or
		ASTM A351 Type CF8M
10.	Body	Bronze ASTM B584 Alloy C84400
11.	Boss seal o-ring	EPDM
12.	Crimp Evident Seal	EPDM - Leak Detection
13.	Press End Adapter	Wrot Copper ASTM B75 Alloy C12200



TPC-585-70-66
Thread x Press
Female

#### **Handle Options:**

- Stainless steel lever
- NIB-SEAL®
- Locking lever
- Stainless steel locking lever
- · Memory stop
- Extended lever w/ memory stop
- Round
- Wing
- Horizontal and vertical chain



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

		Dimensions													
SI	ZE		A B		C		D		E		Weight		Master		
In.	mm.	In.	mm.	In.	mm.	In.	mm.	ln.	mm.	In.	mm.	Lbs.	Kg.	Ctn. Qty.	
1/2"	15	3.10	79	3.96	101	1.96	50	0.50	13	1.86	47	0.85	0.39	50	
3/4"	20	3.96	101	4.76	121	2.28	58	0.75	19	2.45	62	1.50	0.68	30	
1″	25	4.47	114	4.76	121	2.48	63	1.00	25	2.92	74	2.00	0.91	20	
1¼"	32	4.99	127	6.75	171	3.09	78	1.25	32	3.30	84	3.55	1.61	12	
1½"	40	5.90	150	6.75	171	3.32	84	1.50	38	3.84	98	4.90	2.22	6	
2"	50	6.61	168	6.75	171	3.56	90	2.00	51	4.38	111	6.90	3.13	6	

NIBCO Press end ball valves are designed to MSS SP-110 with the exception of Press connections are designed to MSS SP-145. Valves with Press ends are rated to align with NIBCO Press System max pressure.



**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 Bronze Ball Valves

Two-Piece Body • Full Port • Bronze Trim • Blowout-Proof Stem • 3/4" Hose Connection w/Cap and Chain • Press Ends Leak Detection

#### 250 psi/17.2 bar non-shock cold working pressure

#### CONFORMS TO MSS SP-110

#### **MATERIAL LIST**

	PART	SPECIFICATION
1.	Press End Adapter	Wrot Copper ASTM B75 Alloy C12200
2.	Body	Bronze ASTM B584 Alloy C84400
3.	Hose Body End	Brass ASTM B124 Alloy C37700
4.	Hose Cap Assembly <sup>1</sup>	Die Cast Brass , EPDM Gasket, Soft PVC Retainer
5.	Crimp Evident Seal	EPDM - Leak Detection
6.	Boss seal o-ring	EPDM
7.	Ball	Brass ASTM B16 Alloy C36000 or ASTM B283 Alloy C37700 (Chrome/Nickel Plated)
8.	Packing	PTFE
9.	Pack Gland	Brass ASTM B16 Alloy C36000
10.	Stem	Silicon Bronze ASTM B371 Alloy C69300 or ASTM B371 Alloy C69430
11.	Handle Nut	Zinc Plated Steel
12.	Thrust Washer	Reinforced PTFE
13.	Handle Assembly	Zinc Plated Steel Clear Chromate Plastisol Coated
14.	Seat Ring (2)	Reinforced PTFE

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

#### **Handle Options:**

- Stainless steel lever
- NIB-Seal<sup>®</sup>
- Locking lever
- · Stainless steel locking lever
- Memory stop
- Extended lever w/ memory stop
- Round
- Wing
- Horizontal and vertical chain

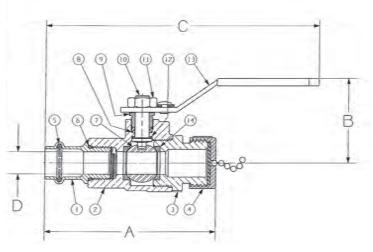
#### **DIMENSIONS—WEIGHTS**

		_									
SI	ZE	D	We	ight							
In.	mm.	In.	mm.	m. In. mm.		In. mm.		In. mm.		Lbs.	Kg.
1/2"	13	3.06	78	1.88	48	6.09	155	.50	13	.92	.42
3/4"	19	4.47	114	2.25	57	7.36	187	.75	19	1.70	.77

NIBCO Press end ball valves are designed to MSS SP-110 with the exception of Press connections are designed to MSS SP-145. Valves with Press ends are rated to align with NIBCO Press System max pressure.



PC-585-70-HC
Press Female x Hose End



**PC-585-70-HC** P x Hose



**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 Bronze Ball Valves

Two-Piece Body • Full Port • Stainless Trim • Blowout-Proof Stem • Vented Ball • 3/4" Hose Connection with Cap and Chain • Press Ends Leak Detection

#### 250 psi/17.2 bar non-shock cold working pressure

#### CONFORMS TO MSS SP-110

#### **MATERIAL LIST**

		IAI LIIIAL LIVI
	PART	SPECIFICATION
1.	Press End Adapter	Wrot Copper ASTM B75 Alloy C12200
2.	Body	Bronze ASTM B584 Alloy C84400
3.	Hose Body End	Brass ASTM B124 Alloy C37700
4.	Hose Cap Assembly <sup>1</sup>	Die Cast Brass, EPDM Gasket, Soft PVC Retainer
5.	Crimp Evident Seal	EPDM - Leak Detection
6.	Boss seal o-ring	EPDM
7.	Ball (vented)	Stainless Steel ASTM A276 Alloy S31600 or ASTM A351 Type CF8M
8.	Packing	PTFE
9.	Pack Gland	Brass ASTM B16 Alloy C36000
10.	Stem	Stainless Steel ASTM A276 Alloy S31600
11.	Handle Nut	300 Series Stainless Steel
12.	Thrust Washer	Reinforced PTFE
13.	Handle Assembly	Zinc Plated Steel Clear Chromate Plastisol Coated
14.	Seat Ring (2)	Reinforced PTFE

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

#### **Handle Options:**

- Stainless steel lever
- NIB-SEAL®
- Locking lever
- · Stainless steel locking lever
- Memory stop
- Extended lever w/ memory stop
- Round
- Wing
- Horizontal and vertical chain

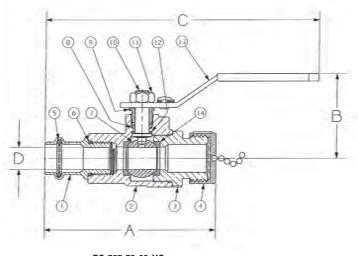
#### **DIMENSIONS—WEIGHTS**

	Dimensions													
SI	ZE		A	В		C			D	Weight				
In.	mm.	In.	mm.	In.	In. mm.		mm.	ln.	mm.	Lbs.	Kg.			
1/2"	13	2.76	70	1.88	48	6.09	155	.50	13	.92	.42			
3/4"	19	3.28	83	2.25	57	7.36	187	.75	19	1.70	.77			

NIBCO Press end ball valves are designed to MSS SP-110 with the exception of Press connections are designed to MSS SP-145. Valves with Press ends are rated to align with NIBCO Press System max pressure.



PC-585-70-66-HC Press Female x Hose End



**PC-585-70-66-HC** P x Hose



**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.

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

**United States Patent** 



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

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/CAN 61-8 & 372 Commercial Hot 18

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**

	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 (1/4"-1")
		Stainless Steel ASTM A276 S31600 or ASTM A351 CF8M (11/4"-3")
10.	Body	Silicon Bronze ASTM B584 Alloy C87600
11.	Boss seal o-ring (2)	EPDM
12.	Crimp Evident Seal (2)	EPDM - Leak Detection
13.	Press End Adapter (2)	Wrot Copper ASTM B75 Alloy C12200

#### **Handle Options:**

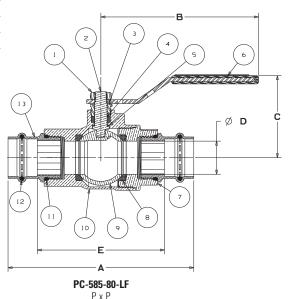
- Stainless Steel Lever
- NIB-SEAL®
- Locking Lever
- Stainless Steel Locking Lever
- Memory Stop
- Extended Lever w/ Memory Stop
- Round
- Wing
- Horizontal and Vertical Chain



**Handle Markings** 



PC-585-80-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
11/4	32	6.23	158	6.76	172	3.10	79	1.25	32	4.21	107	3.73	1.69
11/2	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
21/2	65	9.49	241	8.06	205	4.33	110	2.50	64	6.55	166	16.20	7.35
3	76	10.45	265	8.06	205	4.58	116	2.95	75	7.13	181	16.50	7.48

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

NIBCO Press end ball valves are designed to MSS SP-110 with the exception of Press connections are designed to MSS SP-145. Valves with Press ends are rated to align with NIBCO



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.

Visit our website for the most current information.

LEAD-FREE: Weighted average lead content ≤ 0.25%



# NIBCO® Press System Lead-Free Bronze Ball Valves

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

**Approvals:** MSS SP-110/145 ● IAPMO/ANSI Z1157 ● NSF/ANSI/CAN 61-8 & 372 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









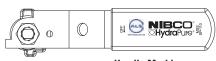


#### **MATERIAL LIST**

	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.	Crimp Evident Seal (2)	EPDM - Leak Detection
13.	Press End Adapter (2)	Wrot Copper ASTM B75 Alloy C12200

#### **Handle Options:**

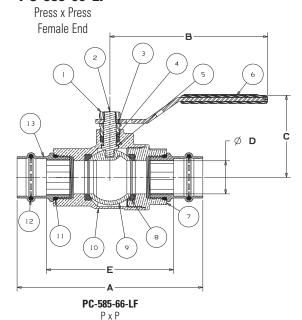
- Stainless Steel Lever
- NIB-SEAL®
- · Locking Lever
- · Stainless Steel Locking Lever
- Memory Stop
- Extended Lever w/ Memory Stop
- Round
- Wing
- Horizontal and Vertical Chain



**Handle Markings** 



#### PC-585-66-LF



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

SI	ZE	-	4	E	3	- 0	;		)	E	:	We	ight
ln.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
1/2	15	3.93	100	3.96	101	1.96	50	0.50	13	2.53	64	0.80	0.36
3/4	20	5.00	127	4.76	121	2.28	58	0.75	19	3.23	82	1.56	0.71
1	25	5.61	142	4.76	121	2.48	63	1.00	25	3.84	98	2.13	1.00
1-1/4	32	6.23	158	6.76	172	3.10	79	1.25	32	4.21	107	3.73	1.69
1-1/2	40	7.56	192	6.76	172	3.32	84	1.50	38	4.79	122	5.53	2.51
2	50	8.40	213	6.76	172	3.56	90	2.00	51	5.36	136	7.95	3.61
2-1/2	65	9.49	241	8.06	205	4.33	110	2.50	64	6.55	166	16.20	7.35
3	76	10.45	265	8.06	205	4.58	116	2.95	75	7.13	181	16.50	7.48

\*200 PSI CWP and 200 PSI at 200°F for 2½" and above

NIBCO Press end ball valves are designed to MSS SP-110 with the exception of Press connections are designed to MSS SP-145. Valves with Press ends are rated to align with NIBCO Press System max pressure.

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  $\leq 0.25\%$ 



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

**Features:** Silicon Performance Bronze<sup>®</sup> 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/CAN 61-8 & 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

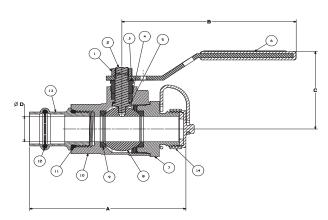
#### **MATERIAL LIST**

	<u> </u>	
	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.	Crimp Evident Seal	EPDM - Leak Detection
13.		Wrot Copper ASTM B75 Alloy C12200
14.	Hose Cap Assembly <sup>1</sup>	Die Cast Brass, EPDM Gasket, Soft PVC Retainer

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

#### Handle Options:

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



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

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

NIBCO Press end ball valves are designed to MSS SP-110 with the exception of Press connections are designed to MSS SP-145. Valves with Press ends are rated to align with NIBCO Press System max pressure.



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.

Visit our website for the most current information.

LEAD-FREE: Weighted average lead content ≤ 0.25%



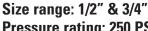
# **NIBCO®** Press System Lead-Free Bronze Ball Valves

**Features:** Silicon Performance Bronze<sup>®</sup> 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/CAN 61-8 & 372







Pressure rating: 250 PSI non-shock cold working pressure

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





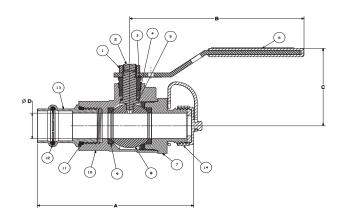
#### **MATERIAL LIST**

	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.	Crimp Evident Seal	EPDM - Leak Detection
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

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



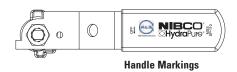
PC-585-66-LF-HC Press Female x Hose End



PC-585-66-LF-HC P x Hose

#### **Handle Options:**

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



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

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

NIBCO Press end ball valves are designed to MSS SP-110 with the exception of Press connections are designed to MSS SP-145. Valves with Press ends are rated to align with NIBCO Press System max pressure.



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 System Lead-Free Bronze Ball Valves

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

Approvals: MSS SP-110 • IAPMO/ANSI Z1157 (IGC-157) • NSF/ANSI/CAN 61-8 Commercial Hot 180°F and NSF/ANSI/CAN 372

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

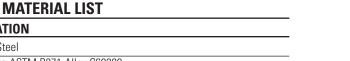
Lead-Free markings: Double oval in body casting, white handle and blue hang tag

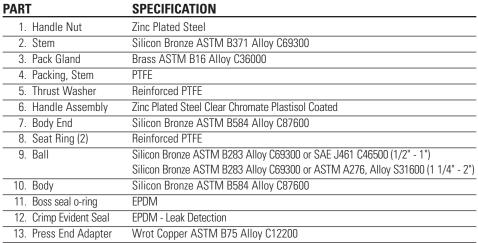












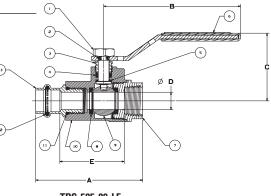


TPC-585-80-LF Thread x Press Female

#### **Handle Options:**

- Stainless steel lever
- NIB-SEAL®
- Locking lever
- Stainless steel locking lever
- Memory stop
- Extended lever w/ memory stop
- Round
- Wing
- Horizontal and vertical chain





TPC-585-80-LF NPT x P

#### DIMENSIONS—WEIGHTS

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

NIBCO Press end ball valves are designed to MSS SP-110 with the exception of Press connections are designed to MSS SP-145. Valves with Press ends are rated to align with NIBCO Press System max pressure.



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.

Visit our website for the most current information.

LEAD-FREE: Weighted average lead content ≤ 0.25%



# NIBCO® Press System Lead-Free Bronze Ball Valves

Features: Silicon Performance Bronze® Body • Copper End • Full Port •

Blowout-Proof Stem • Stainless Trim

Approvals: MSS SP-145 • IAPMO/ANSI Z1157 (IGC-157) • NSF/ANSI/CAN 61-8

Commercial Hot 180°F and NSF/ANSI/CAN 372

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









#### MATERIAI LIST

	IV	AI LIIIAL LIVI
	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.	Crimp Evident Seal	EPDM - Leak Detection
13.	Press End Adapter	Wrot Copper ASTM B75 Alloy C12200

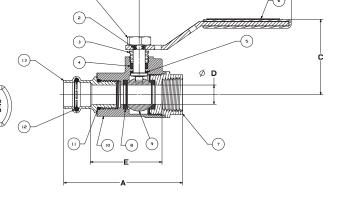
#### **Handle Options:**

- Stainless Steel Lever
- NIB-SEAL®
- 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



TPC-585-66-LF NPT x P

#### **DIMENSIONS—WEIGHTS**

**Handle Markings** 

NOM	SIZE		Α		3		;		D		Ε				3		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

NIBCO Press end ball valves are designed to MSS SP-110 with the exception of Press connections are designed to MSS SP-145. Valves with Press ends are rated to align with NIBCO Press System max pressure.



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%



# **Lead-Free Bronze Ball Valves with Spring Return Handle**

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 Maximum pressure / temperature: 225 psi at 250° F

5/year 5/125%





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/CAN 372

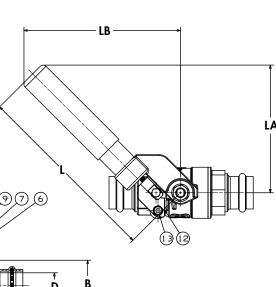
#### **MATERIAL LIST**

	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
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 B371 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 Plastisol 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 O-ring (2)	EPDM
17.	Crimp Evident Seal (2)	EPDM - Leak Detection

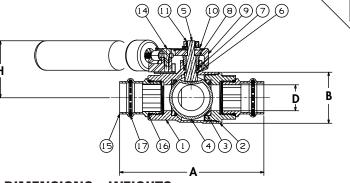


PC-585-80-LF-SR

Press x Press



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



#### **DIMENSIONS—WEIGHTS**

							Di	mensio	ns								
S	ize		4		3							L	Α	L	В	•	
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 end ball valves are designed to MSS SP-110 with the exception of Press connections are designed to MSS SP-145. Valves with Press ends are rated to align with NIBCO Press System max pressure.



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.

Visit our website for the most current information.

LEAD-FREE: Weighted average lead content ≤ 0.25%

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



# NEW Lead-Free Bronze Ball Valves with Spring Return Handle

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





LA

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

#### **MATERIAL LIST**

		MAILMALLIOI
	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 B371 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 O-ring	EPDM
17.	Crimp Evident Seal	EPDM - Leak Detection
18.	Hose cap Assembly <sup>1</sup>	Die Cast Brass, EPDM Gasket, Soft PVC Retainer
1 -		



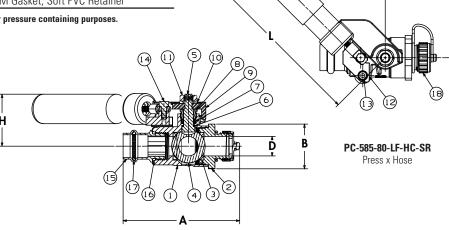
PC-585-80-LF-HC-SR

Press x Hose

LB

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

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



#### **DIMENSIONS—WEIGHTS**

							Di	mensio	ons								
S	ize		A		В		D		Н		<u> </u>		A		В		
ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	In.	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 end ball valves are designed to MSS SP-110 with the exception of Press connections are designed to MSS SP-145. Valves with Press ends are rated to align with NIBCO Press System max pressure.



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

LEAD-FREE: Weighted average lead content ≤ 0.25%



## NIBCO® Press Lead-Free Three Piece Bronze Ball Valves

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

Full Port • Blowout-Proof Stem

**Approvals:** MSS SP-110/145 ● NSF/ANSI/CAN 61-2018 Commercial Hot 180°F, NSF/ANSI/CAN 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

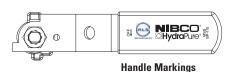






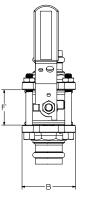
#### **MATERIAL LIST**

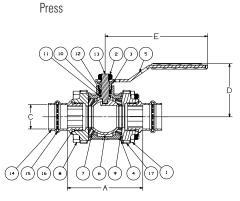
	PART	SPECIFICATION
	Dady Nuta	Zinc Dichromate Plated Steel
1.	Body Nuts	ASTM A449 Grade 5
2.	Handle Nut	Zinc Plated Steel
3.	Threaded Pack Gland	Brass ASTM B16 Alloy C36000
4.	Body	Silicon Bronze ASTM B584 Alloy C87850
5.	Body End (2)	Silicon Bronze ASTM B584 Alloy C87850
6.	Handle	Steel, Plated Plastisol Coated
		DZR Brass SAE J461 C46500 (1/4"-1")
7.	Ball	Stainless Steel ASTM A276 S31600 or ASTM A351 CF8M (1½"-2½")
8.	Seats (2)	PTFE "Y" or RPTFE "R" Glass Reinforced
9.	Dady Dalta	Zinc Dichromate Plated Steel
J.	Body Bolts	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	Silicon Bronze ASTM B371 Alloy C69300
15.	Press End Adapter (2)	Wrot Copper ASTM B75 Alloy C12200
16.	Crimp Evident Seal (2)	EPDM - Leak Detection
17.	Boss Seal O-ring (2)	EPDM





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





#### **DIMENSIONS - WEIGHTS - QUANTITIES**

Size		1	E	3		;		)		Ε		F	Wei	ghts	Master
In.	In.	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

NIBCO Press end ball valves are designed to MSS SP-110 with the exception of Press connections are designed to MSS SP-145. Valves with Press ends are rated to align with NIBCO Press System max pressure.



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.

Visit our website for the most current information.

LEAD-FREE: Weighted average lead content  $\leq 0.25\%$ 



# 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 ● NSF/ANSI/CAN 61-2018 Commercial Hot 180°F, NSF/ANSI/CAN 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

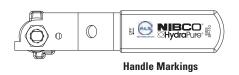




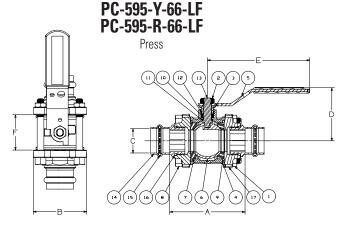


#### **MATERIAL LIST**

		MAI LIMAL LIGI
	PART	SPECIFICATION
1.	Body Nuts	Zinc Dichromate Plated Steel
1.	Dody 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
J.	Dudy Duits	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	Stainless Steel ASTM A276 Type 316
15.	Press End Adapter (2)	Wrot Copper ASTM B75 Alloy C12200
16.	Crimp Evident Seal (2)	EPDM - Leak Detection
17.	Boss Seal O-ring (2)	EPDM







#### **DIMENSIONS - WEIGHTS - QUANTITIES**

Size	Α		В		C		D		E		F		Weights		Master
In.	ln.	mm.	In.	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

NIBCO Press end ball valves are designed to MSS SP-110 with the exception of Press connections are designed to MSS SP-145. Valves with Press ends are rated to align with NIBCO Press System max pressure.



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 System Lead-Free Brass Ball Valves

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

Approvals: IAPMO/ANSI Z1157 (IGC-157) • NSF/ANSI/CAN-61 & 372 • MSS SP-145 • Conforms to ASME B16.51†

Size range: 1/2" - 2"

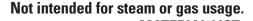
Pressure rating: 250 psi non-shock cold working pressure

Maximum pressure / temperature: 225 psi at 250° F

Lead-Free markings: White handle and blue hang tag

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

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





#### **Options:**

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



**Handle Markings** 

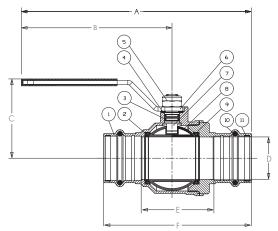






PC-FP-600A-LF

Press x Press 1/2" - 2" Patent US 10,240,698; Sizes 1-1/4" - 2"



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

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

SIZE	SIZE A		В		C		D		E		F		Weight	
In.	In.	mm.	In.	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 <sup>‡</sup>	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 Z1157 ball valve performance requirements, the this product standard 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.

Visit our website for the most current information.

LEAD-FREE: Weighted average lead content ≤ 0.25%

†Tested to the performance criteria of ASME B16.51



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

Approvals: IAPMO/ANSI Z1157 (IGC-157) ● NSF/ANSI/CAN-61 & 372 ● MSS SP-145 ● Conforms to ASME B16.51<sup>†</sup>

Size range: 2 1/2" - 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**

	PART	SPECIFICATION
1	Handle	Steel Plated
2	Handle Cover	PVC
3	Handle Nut	Steel
4	Stem	Brass/Bronze
5	Packing Nut	Brass/Bronze
6	Packing	PTFE
7	Crimp Evident Seal (2)	EPDM - Lead Detection
8	Boss Seal O-ring (2)	EPDM
9	Body End	Brass/Bronze
10	Ball	Stainless Steel
11	Body	Brass/Bronze
12	Seat Ring (2)	PTFE
13	Press End Adaptor (2)	ASTM B75 Alloy C12200

# Options:

Extended lever



**Handle Markings** 



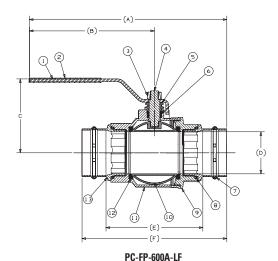






PC-FP-600A-LF

Press x Press 2 1/2" - 4"



Press x Press 2 1/2" - 4"

# **DIMENSIONS—WEIGHTS—QUANTITIES**

SI	SIZE		Α		В		C		D				F	Weight		
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	
2 1/2"	15	13.07	332	8.66	220	4.8	121.9	2.52	64	5.88	149.3	8.81	223.7	9.55	4.33	
3	20	13.67	347.2	8.66	220	5.12	130	2.91	73.9	6.71	170.4	10.03	261.6	13.07	5.93	
4	25	15.87	403.1	9.61	244.1	5.98	151.9	3.9	99	8.21	208.5	12.53	318.2	26.32	11.94	

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

- 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

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

Visit our website for the most current information.

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



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

Approvals: IAPMO/ANSI Z1157 (IGC-157) • NSF/ANSI/CAN-61 & 372 • MSS SP-145 • Conforms to ASME B16.51†

Size range: 1/2" - 1"

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

Lead-Free markings: White handle and blue hang tag

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

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

# Not intended for steam or gas usage.

### **MATERIAL LIST**

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

# **Options:**

- Extended lever
- **EPDM Seal for Press Ends**
- Lever Handle
- Mini Flat





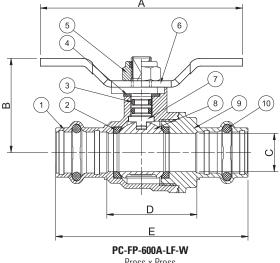






# PC-FP-600A-LF-W

Press x Press 1/2" - 1"



Press x Press 1/2" - 1"

†Tested to the performance criteria of ASME B16.51

# **DIMENSIONS—WEIGHTS**

Size		Α		В		С			)		E	Weight		
In.	mm.	In.	mm.	ln.	mm.	ln.	mm.	In.	mm.	ln.	mm.	Lbs.	Kg.	
1/2	12.7	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 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

reproductive harm. For more information go to www.P65Warnings.ca.gov. Visit our website for the most current information.

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



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

Approvals: IAPMO/ANSI Z1157 (IGC-157) • NSF/ANSI/CAN-61 & 372 • MSS SP-145 • Conforms to ASME B16.51†

Size range: 1/2" - 1"

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

Lead-Free markings: White handle and blue hang tag

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

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

# Not intended for steam or gas usage.

## **MATERIAL LIST**

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



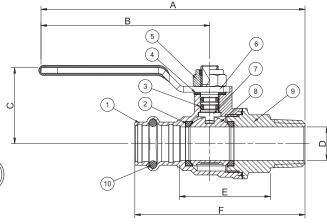
**Handle Markings** 





# PCMT-FP-600A-LF

Press x MIP 1/2" - 1"



PCMT-FP-600A-LF Press x Male 1/2" - 1"

### **DIMENSIONS—WEIGHTS**

	SIZE		A		B		C		D			<u> </u>		<u> </u>	Weight		
	ln.	mm.	In.	mm.	In.	mm.	ln.	mm.	ln.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.	
_	1/2	12.7	5.30	134.70	3.62	92.00	1.34	34.00	0.59	15.00	1.60	40.70	3.00	76.20	0.4520	0.2050	
	3/4	19.05	6.07	154.20	4.13	105.00	2.06	52.20	0.79	20.00	2.00	50.70	3.53	89.70	0.7940	0.3601	
	1	25.40	6.29	159.70	4.13	105.00	2.21	56.20	0.98	25.00	2.23	56.70	3.89	98.70	1.1730	0.5320	

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

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

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

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

LEAD-FREE: Weighted average lead content ≤ 0.25%

Visit our website for the most current information.

†Tested to the performance criteria of ASME B16.51



# NIBCO® Press System Lead-Free Brass Ball Valves

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

Approvals: IAPMO/ANSI Z1157 (IGC-157) • NSF/ANSI/CAN-61 & 372 • MSS SP-145 • Conforms to ASME B16.51†

Size range: 1/2" - 1"

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

Lead-Free markings: White handle and blue hang tag

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

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

# Not intended for steam or gas usage.

# **MATERIAL LIST**

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

# **Options:**

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



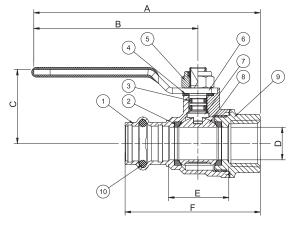
**Handle Markings** 





PCT-FP-600A-LF

Press x FIP 1/2" - 1"



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

# **DIMENSIONS—WEIGHTS**

SIZE		A		B		C		D		E		F		Weight	
ln.	mm. In. mm. In. mm.		mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.		
1/2	12.7	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 °C (68°F)
- 2. Unrestrained Hydrostatic Pressure Test at 93 °C (200°F)
- 3. Static Torsion Test for Press Connections 4. Bending Test
- 5. Vacuum Test

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

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

Visit our website for the most current information.

LEAD-FREE: Weighted average lead content ≤ 0.25%

†Tested to the performance criteria of ASME B16.51



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

Approvals: IAPMO/ANSI Z1157 (IGC-157) • NSF/ANSI/CAN-61 & 372 • MSS SP-145 • Conforms to ASME B16.51†

Size range: 1/2" - 1"

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

Lead-Free markings: White handle and blue hang tag

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

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

# Not intended for steam or gas usage.

# **MATERIAL LIST**

	1117 11 21117 12 210 1
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
- Mini Flat



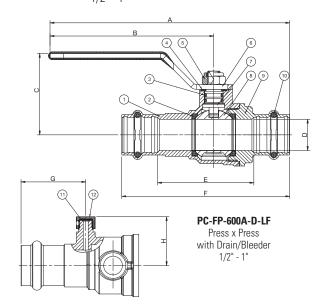
**Handle Markings** 





PC-FP-600A-D-LF

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



# **DIMENSIONS—WEIGHTS**

S	SIZE		A		A B		<u> </u>		C	D			E		F		G		<u>H</u>		Weight	
In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	ln.	mm.	In.	mm.	ln.	mm.	In.	mm.	Lbs.	Kg.			
1/2	12.7	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
- 5. Vacuum Test

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

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

LEAD-FREE: Weighted average lead content ≤ 0.25%

Visit our website for the most current information.

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: IAPMO/ANSI Z1157 (IGC-157) • NSF/ANSI/CAN-61 & 372 • MSS SP-145 • Conforms to ASME B16.51†

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

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

Lead-Free markings:

White handle and blue hang tag

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

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

# Not intended for steam or gas usage.

### **MATERIAL LIST**

	PART	SPECIFICATION
1.	Body	Forged DZR Copper Alloy - C46500
2.	Seat Seal	PTFE
3.	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
13.	Cap Retainer	NBR

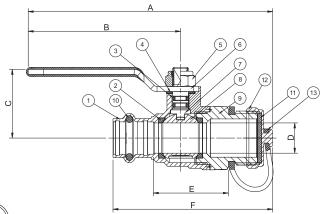
**Handle Markings** 





# 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"

### DIMENSIONS—WEIGHTS

Dimensions Weight															
SIZE		A			B C			)			F		Weight		
ln.	mm.	In.	mm.	In.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
1/2	12.7	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	N 79	20.00	1 74	44 20	3 52	89 50	n 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)

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

3. Static Torsion Test for Press Connections

4. Bending Test 5. Vacuum Test

**Options:** 

Extended lever

Wing Handle Mini Flat

**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.

Visit our website for the most current information.

LEAD-FREE: Weighted average lead content ≤ 0.25%

†Tested to the performance criteria of ASME B16.51



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 ● NSF/ANSI/CAN 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.	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 (½"-1")
		Stainless Steel 316 (11/4"-2")
11.	End Cap	Forged DZR Copper Alloy - C46500 (F1960 Cold Expansion)
12.	O-ring	EPDM - ASTM D2000 (Leak Detect)
13.	Metal Ring	Stainless Steel (11/4"-2")

# **Options:**

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



**Handle Markings** 

# DIMENSIONS—WEIGHTS

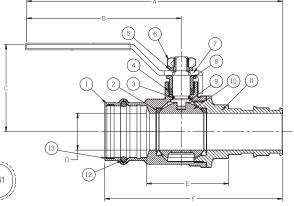








Press x PEX (F1960 - Cold Expansion) 1/2" - 2" Patent US 10,240,698; Sizes 1-1/4" - 2"



PCPXA-FP-600A-LF

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

SIZE A		<u> </u>		C			D		E		<u>F</u>	Weight		
In.	In.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	In.	mm.	ln.	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 1/2"	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:

<sup>†</sup>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)
- 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

- 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. LEAD-FREE: Weighted average lead content ≤ 0.25%



# NIBCO® Press System Lead-Free Brass Ball Valves

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 ● NSF/ANSI/CAN 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.	0-ring	EPDM - ASTM D2000
4.	Packing	PTFE
5.	Washer	Stainless Steel ASTM 321
6.	Lock Nut	Stainless Steel 304
7.	Handle	Steel, Plated
8.	Nut	Brass
9.	Stem	Brass
10	Ball	Chrome Plated Brass - C46500 (1/2"-1")
10.	Ddll	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 (1¼"-2")

## **Options:**

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



**Handle Markings** 

# **DIMENSIONS—WEIGHTS**



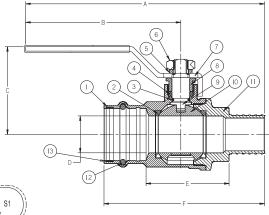






# PCPX-FP-600A-LF

Press x PEX (F1807 - Crimp) 1/2" - 2" Patent US 10,240,698; Sizes 1-1/4" - 2"



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

SIZE A		Α		B		C		D .		<u> </u>		<u>F</u>	Weight		
In.	In.	mm.	In.	mm.	ln.	mm.	ln.	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 1/2"	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:

<sup>†</sup>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)
- 4. Bending Test 5. Vacuum Test
- 7. Vibration Test 8. Thermal Cycling Test
- Alternate Thermal Cycling Test
   Dynamic Torsion Test for Press Connections

- ${\bf 3.\ Static\ Torsion\ Test\ for\ Press\ Connections}$
- 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.

Visit our website for the most current information.

LEAD-FREE: Weighted average lead content ≤ 0.25%



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

Approvals: IAPMO/ANSI Z1157 (IGC-157) • NSF/ANSI/CAN 61 & 372 • MSS SP-145 • Conforms to ASME B16.51†

Size range: 1/2" - 1"

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

Lead-Free markings: White handle and blue hang tag

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

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

# Not intended for steam or gas usage.

### **MATERIAL LIST**

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







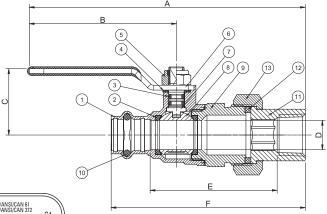






PCFU-FP-600A-LF

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

SIZE		Α		В		С			D			F		Weight	
In.	mm.	In.	mm.	In.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
1/2	12.7	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 °C (200°F)
- 3. Static Torsion Test for Press Connections
- 4. Bending Test

Options:

Extended lever

Wing Handle

Mini Flat

**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.

LEAD-FREE: Weighted average lead content ≤ 0.25%



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/CAN 61/372 • Conforms to ASME B16.51

Size range: 1/2" - 1"

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

Lead-free markings: White handle and blue hang tag

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

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

# Not intended for steam or gas usage.

### **MATERIAL LIST**

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





NSF/ANSI/CAN 61 & 372 IAPMO/ANSI Z1157

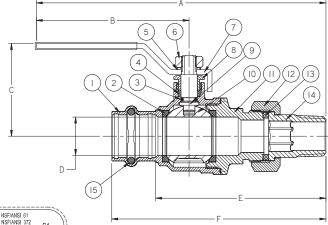






# PCMU-FP-600A-LF

Press x MIP Union 1/2" - 1"



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

# **DIMENSIONS—WEIGHTS**

SIZE		Α		В		С			D		E	F		Weight	
In.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
1/2"	12.70	6.31	160.20	3.62	92.00	1.34	34.00	0.59	15.00	2.60	66.00	4.00	101.70	0.6720	0.3048
3/4"	19.05	6.92	175.70	4.13	105.00	2.06	52.20	0.79	20.00	2.81	71.50	4.38	111.20	1.0580	0.4799
1"	25.40	7.13	181.20	4.13	105.00	2.21	56.20	0.98	25.00	3.05	77.50	4.73	120.20	1.5790	0.7162
3/4" x 1/2"	3/4" x 1/2" MIP		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 ASME B16.51

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

**Options:** 

Extended lever

Wing Handle

Mini Flat

**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.

Visit our website for the most current information.

LEAD-FREE: Weighted average lead content ≤ 0.25%



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

Approvals: IAPMO/ANSI Z1157 (IGC-157) • NSF/ANSI/CAN 61 & 372 • MSS SP-145 • Conforms to ASME B16.51†

Size range: 1/2" - 1"

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

Lead-Free markings: White handle and blue hang tag

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

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

# Not intended for steam or gas usage.

## **MATERIAL LIST**

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



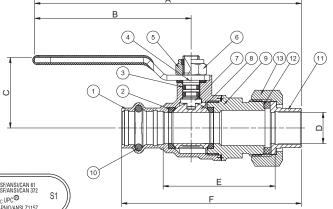
**Handle Markings** 





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**

S	SIZE		Α		3	С		D		E		F		Weight	
In.	mm.	In.	mm.	In.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	Lbs.	Kg.
1/2	12.7	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
- 5. Vacuum Test

**Options:** 

Extended lever

Wing Handle

Mini Flat

**EPDM Seal for Press Ends** 

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

reproductive harm. For more information go to www.P65Warnings.ca.gov. LEAD-FREE: Weighted average lead content ≤ 0.25%

Visit our website for the most current information.

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

Dezincification

Resistant

NSF/ANSI/CAN 61 & 372



# NIBCO® Press System Lead-Free Brass Ball Valves

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/CAN 61/372 • Conforms to ASME B16.51

Size range: 1/2" - 1"

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

Lead-free markings: White handle and blue hang tag

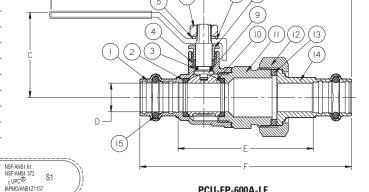
**Applications:** Drinking Water • Domestic Hot & Cold Water • HVAC (condensors, chilled water, hot water heating) • Isolation and Throttling (half-open to full-open only) • Connect to Rigid Copper Tubing Manufactured per ASTM B88, Condition H (hard drawn)

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

# Not intended for steam or gas usage.

### MATERIAI LIST

		MAI LINAL 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

# **Handle Markings**

PCU-FP600A-LF

# DIMENSIONS—WEIGHTS

SIZE		Α		В		С			D		E	F		Weight	
ln.	mm.	In.	mm.	In.	mm.	ln.	mm.	In.	mm.	In.	mm.	ln.	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	0.77	0.35
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	1.19	0.54
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	1.77	0.80

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

6. Hydraulic Shock (Water Hammer) Test

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

10. Dynamic Torsion Test for Press Connection

†Tested to the performance criteria of ASME B16.51

1/2" - 1 "

**Options:** 

Extended lever

Wing Handle

Mini Flat

**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.

Visit our website for the most current information.

LEAD-FREE: Weighted average lead content ≤ 0.25%

Dezincification

Resistant

NSF/ANSI/CAN 61 & 372



# NIBCO® Press System Lead-Free Brass Ball Valves

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/CAN 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

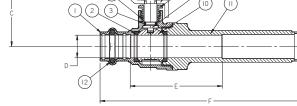
**Applications:** Drinking Water • Domestic Hot & Cold Water • HVAC (condensors, chilled water, hot water heating) • Isolation and Throttling (halfopen to full-open only) • Connect to Rigid Copper Tubing Manufactured per ASTM B88, Condition H (hard drawn)

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



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

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

# **Options:**

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



Handle Markings

### **DIMENSIONS—WEIGHTS—QUANTITIES**

_	SIZE	SIZE A		B	3	C	;		D	E			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 Z1157: in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press ends to be fully tested to IAPMO PS-117 performance requirements which includes the following additional tests:

†Tested to the performance criteria of ASME B16.51

- 1. Unrestrained Hydrostatic Pressure Test at 20  $^{\circ}\text{C}$  (68°F)
- 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
- st 10. Dynamic Torsion Test for Press Connections

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

LEAD-FREE: Weighted average lead content ≤ 0.25%



Features: All-in-one Ball and Inline Check Valve • 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/CAN 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

Dezincification Resistant IAPMO NSF/ANSI/CAN 61 & 372

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.

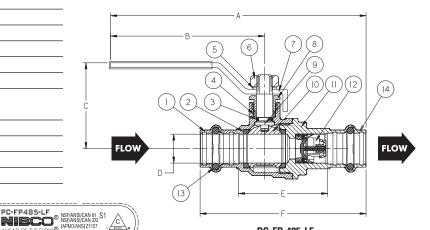
### **MATERIAL LIST**

		III/ (I EIII/ (E EIO I
PART	Γ	SPECIFICATION
1. Body		Forged DZR Copper Alloy - C46500
2. Seat	Seal (2)	PTFE
3. O-ring	g	EPDM - ASTM D2000
4. Packi	ng	PTFE
5. Wash	ner	Stainless Steel ASTM 321
6. Lock	Nut	Stainless Steel 304
7. Hand	le	Steel, Plated
8. Nut		Brass
9. Stem		Brass
10. Ball		Chrome Plated Brass - C46500 (1/2"-1")
		Stainless Steel 316 (11/4"-11/2")
11. End C	Сар	Forged DZR Copper Alloy - C46500
12. Check	k Valve	OV25-HT Cartridge
13. O-ring	g (2)	EPDM - ASTM D2000 (Leak Detect)
14. Meta	I Ring (2)	Stainless Steel (1¼"-1½")

# PC-FP-485-LF

Press x Press 1/2" - 11/2" (Patent US 10,240,698: sizes 11/4"-11/2")





### Handle Markings

PC-FP485-LF

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

### DIMENSIONS—WEIGHTS

SIZE	Α			В	(	;		)		E		F	We	ight
ln.	In. mm.		ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	Lbs.	Kg.
1/2"	5.87	149.00	3.78	96.00	1.83	46.50	0.631	16.03	1.82	46.20	3.39	86.20	0.50	0.23
3/4"	6.58	167.20	3.98	101.00	2.11	53.50	0.883	22.43	2.39	60.70	4.20	106.70	0.88	0.40
1"	7.36	187.00	4.37	111.00	2.58	65.50	1.140	28.96	2.90	73.70	4.71	119.70	1.42	0.65
11/4"	8.82	224.00	5.04	128.00	2.70	68.50	1.386	35.20	3.62	91.90	5.86	148.90	2.16	0.98
11/2"	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 Z1117 performance requirements which includes the following additional tests:

†Tested to the performance criteria of ASME B16.51 ‡ Patent US 10.240.698

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

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.

Visit our website for the most current information.

LEAD-FREE: Weighted average lead content ≤ 0.25%

**Options:** 

Extended lever

Wing Handle

Mini Flat

**EPDM Seal for Press Ends** 



# **NIBCO®** Press System Bronze Gate Valves

Screw-In Bonnet • Rising Stem • Solid Wedge

200 psi/13.8 bar non-shock cold working pressure 250°F maximum operating temperature

CONFORMS TO MSS SP-80/SP-139

# **MATERIAL LIST**

	PART	SPECIFICATION
1.	Handwheel Nut	300 Series Stainless Steel
2.	Identification Plate	Aluminum
3.	Handwheel	Malleable Iron ASTM A 47
4.	Stem	Silicon Bronze ASTM B 371 Alloy C69430
		or ASTM B 99 Alloy C65100
5.	Pack Nut	Brass ASTM B 16 Alloy C36000
6.	Pack Gland	Brass ASTM B 16 Alloy C36000
7.	Packing	Aramid Fibers with Graphite
8.	Bonnet	Bronze ASTM B 62 Alloy C83600
9.	Body Assembly	Bronze ASTM B 62 Alloy C83600
10.	Wedge	Bronze ASTM B 62 Alloy C83600
11.	Female Adapter (2)	Wrot Copper ASTM B75 Alloy C12200
12.	0-Ring (2)	EPDM

# **DIMENSIONS—WEIGHTS**

Siz	e e		Α		3		C	Weight		
In.	In. mm.		mm.	ln.	mm.	ln.	mm.	Lbs.	Kg.	
1/2 †	15	1.97	50	4.81	122	.50	13	.84	.38	
3/4	20	2.62	67	5.81	148	.75	19	1.30	.59	
1	25	3.07	78	7.09	180	1.00	25	2.09	.95	
1 1/4	32	3.36	85	8.13	206	1.25	32	2.95	1.34	
1 1/2	40	3.70	94	9.81	249	1.50	38	4.16	1.89	
2	50	4.28	109	11.56	294	2.00	51	6.79	3.09	

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

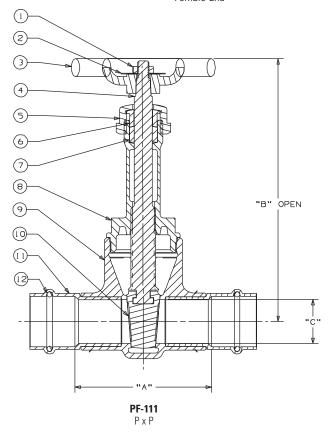
NIBCO Press end gate valves are designed to MSS SP-80 with the exception of Press connections designed to MSS SP-139. Valves with Press ends are rated to align with NIBCO Press System max pressure.

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.





**PF-111**Press x Press
Female End





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

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

# Pressure rating: 250<sup>†</sup> psi non-shock cold working pressure Maximum pressure / temperature: 150 psi at 250° F

Lead-Free markings:

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

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

# **MATERIAL LIST**

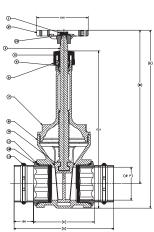
	PART	SPECIFICATION
1.	Handwheel Nut	300 Series Stainless Steel
2.	Handwheel	Malleable Iron ASTM A47, 35018
3.	Stem	Silicon Bronze ASTM B371 Alloy C69430
4.	Packing Gland	ASTM B16 C36000
5.	Stem Packing	Aramid Fibers with Graphite
6.	Packing Nut	ASTM B16 C36000
7.	Bonnet	Silicon Bronze ASTM B584 Alloy 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.	Crimp Evident Seal (2)	EPDM - Leak Detection











PC-111-LF Press x Press Female End

# **DIMENSIONS—WEIGHTS—QUANTITIES**

SIZ	ZE		Α		В		С		)		<u> </u>		F		G		Н	We	ight	Master
ln.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	mm.	ln.	mm.	In.	mm.	In.	mm.	In.	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	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>† 200</sup> psi for 2 1/2" and 3"

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

Dezincification

Resistant



AHEAD OF THE FLOW

# **NIBCO®** Press System Bronze Gate Valves

Screw-In Bonnet • Non-Rising Stem • Solid Wedge

200 psi/13.8 bar non-shock cold working pressure 250°F maximum operating temperature

CONFORMS TO MSS SP-80/139

# **MATERIAL LIST**

	PART	SPECIFICATION
1.	Handwheel Nut	300 Series Stainless Steel
2.	Identification Plate	Aluminum
3.	Handwheel	Malleable Iron ASTM A 47
4.	Stem	Silicon Bronze ASTM B 371 Alloy C69430
		or ASTM B 99 Alloy C65100
5.	Pack Nut	Brass ASTM B 16 Alloy C36000
6.	Pack Gland	Brass ASTM B 16 Alloy C36000
7.	Packing	Aramid Fibers with Graphite
8.	Stuffing Box	Bronze ASTM B 62 Alloy C83600
9.	Bonnet	Bronze ASTM B 62 Alloy C83600
10.	Body Assembly	Bronze ASTM B 62 Alloy C83600
11.	Wedge	Bronze ASTM B 62 Alloy C83600
12.	Female Adapter (2)	Wrot Copper ASTM B75 Alloy C12200
13.	O-Ring (2)	EPDM

# **DIMENSIONS—WEIGHTS**

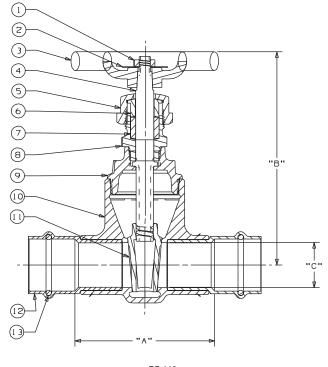
Siz	e		A	E	3	(	C	Weight		
In.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	Lbs.	Kg.	
1/2 †	15	1.97	50	3.63	92	.50	13	.78	.36	
3/4	20	2.62	67	3.91	99	.75	19	1.21	.55	
1	25	3.07	78	4.69	119	1.00	25	1.92	.88	
1 1/4	32	3.36	85	5.22	133	1.25	32	2.69	1.22	
1 1/2	40	3.70	94	6.25	159	1.50	38	3.91	1.78	
2	50	4.28	109	7.06	179	2.00	51	6.21	2.83	

 $<sup>\</sup>ensuremath{^{\dagger}}$  No packing gland, packing only in this size.

NIBCO Press end gate valves are designed to MSS SP-80 with the exception of Press connections designed to MSS SP-139. Valves with Press ends are rated to align with NIBCO Press System max pressure.



**PF-113**Press x Press
Female End



**PF-113** P x P



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

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

# Pressure rating: 250<sup>†</sup> psi non-shock cold working pressure Maximum pressure / temperature: 150 psi at 250° F

Lead-Free markings:

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

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

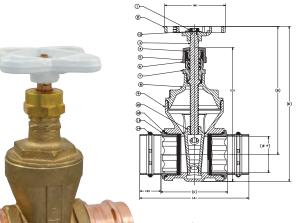
# **MATERIAL LIST**

	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.	Crimp Evident Seal (2)	EPDM - Leak Detection









PC-113-LF Press x Press Female End

### **DIMENSIONS—WEIGHTS—QUANTITIES**

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

<sup>† 200</sup> psi for 2 1/2" and 3"

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

Dezincification



AHEAD OF THE FLOW

**NIBCO®** Press System Bronze Globe Valves

Screw-In Bonnet • Integral Seat • Renewable Seat and Disc

# 200 psi/13.8 bar non-shock cold working pressure 250°F maximum operating temperature

CONFORMS TO MSS SP-80/139

# **MATERIAL LIST**

	PART	SPECIFICATION
1.	Handwheel Nut	300 Series Stainless Steel
2.	Identification Plate	Aluminum
3.	Handwheel	Malleable Iron ASTM A 47
4.	Stem	Silicon Bronze ASTM B 371 Alloy C69430
5.	Pack Gland	Brass ASTM B 16 Alloy C36000
6.	Pack Nut	Brass ASTM B 16 Alloy C36000
7.	Packing	Aramid Fibers with Graphite
8.	Bonnet	Bronze ASTM B 62 Alloy C83600
9.	Disc Holder Nut	Bronze ASTM B 62 Alloy C83600
10.	Disc Holder	Bronze ASTM B 62 Alloy C83600
11.	Disc	PTFE
12.	Disc Washer	304 Stainless Steel
13.	Disc Nut	Bronze ASTM B 98 Alloy C65100
14.	Body Assembly	Bronze ASTM B62 Alloy C83600
15.	Female Adapter (2)	Wrot Copper ASTM B75 Alloy C12200
16.	0-Ring (2)	EPDM

# **DIMENSIONS—WEIGHTS**

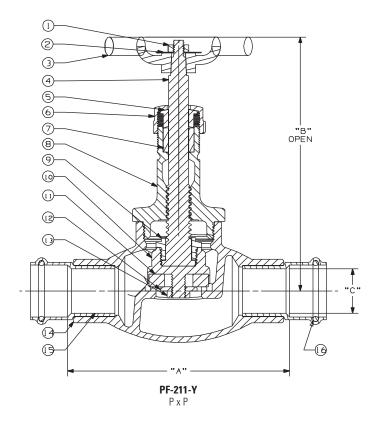
				Dime	nsions				
Siz	e.		Α		3		C	We	eight
In.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	Lbs.	Kg.
*1/2†	15	2.91	74	3.38	86	.50	13	1.07	.48
3/4	20	3.99	101	4.88	124	.75	19	2.04	.93
_1	25	4.88	124	5.69	145	1.00	25	3.13	1.42
1 1/4	32	5.23	133	6.13	156	1.25	32	4.00	1.82
1 ½	40	6.01	153	7.38	187	1.50	38	6.44	2.93
2	50	7.41	188	7.94	202	2.00	51	10.16	4.62

 $<sup>\</sup>ensuremath{^{\dagger}}$  No packing gland, packing only in this size.

NIBCO Press end gate valves are designed to MSS SP-80 with the exception of Press connections designed to MSS SP-139. Valves with Press ends are rated to align with NIBCO Press System max pressure.



**PF-211-Y**Press x Press
Female End



<sup>\*</sup> Stem and disc (or disc holder) are integral.

Dezincification

AHEAD OF THE FLOW

# **NIBCO®** Press System Bronze Angle Valves

Screw-In Bonnet • Integral Seat • Renewable Seat and Disc

200 psi/13.8 bar non-shock cold working pressure 250°F maximum operating temperature

CONFORMS TO MSS SP-80/139

# **MATERIAL LIST**

	IVIA	I LINAL LIOI
	PART	SPECIFICATION
1.	Handwheel Nut	300 Series Stainless Steel
2.	Identification Plate	Aluminum
3.	Handwheel	Malleable Iron ASTM A 47
4.	Stem	Silicon Bronze ASTM B 371 Alloy C69430
5.	Pack Gland	Brass ASTM B 16 Alloy C36000
6.	Pack Nut	Brass ASTM B 16 Alloy C36000
7.	Packing	Aramid Fibers with Graphite
8.	Bonnet	Bronze ASTM B 62 Alloy C83600
9.	Disc Holder Nut	Bronze ASTM B 62 Alloy C83600
10.	Disc Holder	Bronze ASTM B 62 Alloy C83600
11.	Disc	PTFE
12.	Disc Washer	304 Stainless Steel
13.	Disc Nut	Silicon Bronze ASTM B 96 Alloy C65100
14.	Body	Bronze ASTM B 62 Alloy C83600
15.	Female Adapter (2)	Wrot Copper ASTM B75 Alloy C12200
16.	O-Ring (2)	EPDM

# **DIMENSIONS—WEIGHTS**

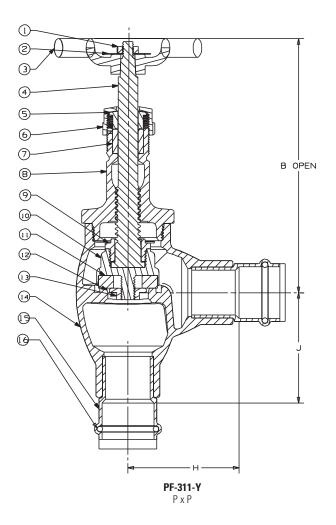
Dimensions									
Si	ze		В	ŀ	ł	,	J	We	ight
In.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	Lbs.	Kg.
*1/2†	15	3.50	89	1.49	38	1.49	38	1.07	.48
3/4	20	4.94	126	2.00	51	2.00	51	1.94	.88
1	25	5.75	146	2.48	63	2.48	63	3.12	1.42
1 1/4	32	6.13	156	2.59	66	2.59	66	4.21	1.92
1 1/2	40	7.25	179	2.98	76	2.98	76	5.44	2.47
2	50	8.13	206	3.64	93	3.64	93	9.98	4.54

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

NIBCO Press end gate valves are designed to MSS SP-80 with the exception of Press connections designed to MSS SP-139. Valves with Press ends are rated to align with NIBCO Press System max pressure.

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.





<sup>\*</sup> Stem and disc or disc holder are integral.



# **Lead-Free Bronze Check Valves**

Silicon Performance Bronze® Alloy • Horizontal Swing • Regrinding Type • Y-Pattern • Renewable Seat and Disc • Conforms to MSS SP-139 • Press Ends





Pressure rating: 200 psi non-shock cold working pressure Maximum pressure / temperature: 125 psi at 250° F

Lead-Free marking: Double oval in body casting

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

# **MATERIAL LIST**

	WAI LINAL LIST						
	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.	Boss Seal O-ring (2)	EPDM					
11.	Press End Adapter (2)	ASTM B75 Alloy C12200					
12.	Crimp Evident Seal (2)	EPDM - Leak Detection					

<sup>\*</sup>Sizes  $\frac{3}{4}$ ", 1",  $\frac{1}{4}$ ",  $\frac{1}{2}$ " and 2" only

# **DIMENSIONS—WEIGHTS**

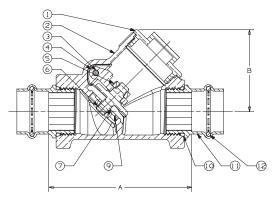
Dimensions								
SI	ZE	A (Lay Length)		B (Height)		Master	Weight	
ln.	mm.	ln.	mm.	ln.	mm.	Ctn Qty	Lbs.	Kg.
1/2	15	2.78	71	1.66	42	40	0.72	0.33
3/4	20	3.25	83	1.90	48	40	1.13	0.51
1	25	3.97	101	2.27	58	25	1.80	0.82
11/4	32	4.64	118	2.67	68	20	2.42	1.10
11/2	40	5.00	127	3.09	79	16	3.75	1.70
2	50	5.85	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.



PC-413-Y-LF Press Ends



PC-413-Y-LF Press x Press

NSF/ANSI/CAN 372

Dezincification



AHEAD OF THE FLOW

# **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/CAN 61-8 Commercial Hot 180°F

and NSF/ANSI/CAN 372
Size range: 1/2" - 2"

Pressure rating: 250 PSI non-shock cold working pressure

Maximum pressure / temperature: 140 PSI at 250° F

Lead-free marking: Double oval in body casting



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

Press Ends

6

### **MATERIAL LIST**

PART	SPECIFICATION
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 (2)	EPDM
8. Boss Seal O-ring (2)	EPDM - Leak Detection
9. Body	Silicon Bronze ASTM B584 Alloy C87600
10. Body End	Silicon Bronze ASTM B584 Alloy C87600

### **DIMENSIONS—WEIGHTS—QUANTITIES**

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

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

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

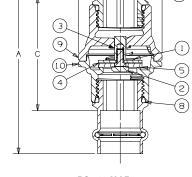
Install 5 Pipe diameters minimum downstream from pump discharge or changes in direction to avoid flow turbulence. Flow straighteners may be required in extreme cases.

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

Visit our website for the most current information.

LEAD-FREE: Weighted average lead content ≤ 0.25%



# **NIBCO®** Press System Bronze Check Valves

Horizontal Swing • Regrinding Type • Y-Pattern • Renewable Seat and Disc

200 psi/13.8 bar non-shock cold working pressure 250°F maximum operating temperature

CONFORMS TO MSS SP-80/139



	IVI	ATERIAL LIST
	PART	SPECIFICATION
1.	Bonnet	Bronze ASTM B 62 Alloy C83600
2.	Body	Bronze ASTM B 62 Alloy C83600
3.	Hinge Pin	Bronze ASTM B 140 Alloy C31400
4.	Disc Hanger	Bronze ASTM B 62 Alloy C83600 or 304 SS 1/2" and 3/4" sizes only
5.	Hanger Nut	Brass ASTM B 16 Alloy C36000
6.	Disc Holder	Bronze ASTM B 62 Alloy C83600
7.	Seat Disc	PTFE
8.	Seat Disc Nut	Brass ASTM B 16 Alloy C36000
9.	Hinge Pin Plug	Bronze ASTM B 140 Alloy C32000 (not shown)
*10.	Seat Disc Washer	ASTM B 98 Alloy C65500 or ASTM B 103
11.	Female Adapter (2)	Wrot Copper ASTM B75 Alloy C12200
12.	O-Ring (2)	EPDM





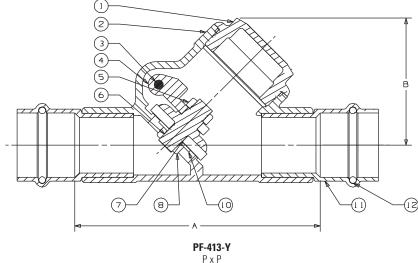
### **DIMENSIONS—WEIGHTS**

			_				
Si	ze		Α	ı	3	We	eight
In.	mm.	ln.	mm.	ln.	mm.	Lbs.	Kg.
1/2	15	2.72	69	1.54	39	.58	.26
3/4	20	3.62	92	1.83	46	.96	.44
1	25	4.32	110	2.21	56	1.51	.69
1 1/4	32	4.92	125	2.69	68	2.29	1.04
1 1/2	40	5.58	142	2.94	75	3.30	1.50
2	50	6.72	171	3.61	92	5.45	2.48

NIBCO Press end gate valves are designed to MSS SP-80 with the exception of Press connections designed to MSS SP-139. Valves with Press ends are rated to align with NIBCO Press System max pressure.

WARNING — Do not use for reciprocating air compressor service

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°).



<sup>\*</sup> Sizes 3/4" thru 2" only



# **NIBCO®** Press System Bronze In-line Lift Check Valves

In-Line Lift Type • Resilient Discs • Spring Actuated

200 psi/17.2 bar non-shock cold working pressure 250°F maximum operating temperature



### **MATERIAL LIST**

	, =, .= =
PART	SPECIFICATION
1. Body	Bronze ASTM B584 Alloy C84400
2. Stem	Stainless Steel ASTM A582
Z. Stem	Alloy C30300
3. Spring	316 Stainless Steel
4. Disc Holder	Stainless Steel Type 301
5. Disc	PTFE
6. Seat Screw	Stainless Steel ASTM A276
o. Seat Strew	Alloy S43000
7. Body End	Bronze ASTM B584 Alloy C84400
8. Adapter (2)	Wrot Copper ASTM B75 Alloy C12200
9. O-Ring (2)	EPDM



PF-480-Y
Press x Press
Female End

# **DIMENSIONS—WEIGHTS**

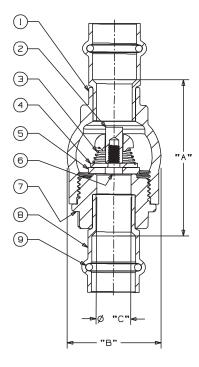
				Dime	nsions	6			
Si	ze	-	A		В	(	C	Weig	ght
ln.	mm.	ln.	mm.	ln.	mm.	ln.	mm	Lbs.	Kg.
1/2	15	2.41	61	1.38	35	.50	13	0.52	0.24
3/4	20	3.05	77	1.63	41	.75	19	0.75	0.34
1	25	3.56	90	2.00	51	1.00	25	1.18	0.54
1 1/4	32	3.86	98	2.38	60	1.25	32	1.72	0.78
1 ½	40	4.45	113	2.75	70	1.50	38	2.49	1.13
2	50	5.28	134	3.38	86	2.00	51	3.96	1.80

NIBCO Press System check valves may be installed in both horizontal and vertical lines with upward flow or in any intermediate position.

WARNING - Do Not Use for reciprocating air compressor service.

NOTE: 0.5 psi pressure required to open spring.

NOTE: Check valves are down-rated from 250 psi CWP to 200 psi CWP to match the Press System.



 $\begin{array}{c} \textbf{PF-480-Y (PTFE Disc)} \\ P \ X \ P \end{array}$ 



# **NIBCO®** Press System Butterfly Valves

Ductile Iron Body • Extended Neck • Geometric Drive Molded-In Seat Liner • Lug Style with Press x Press Female Ends

200 psi/13.8 bar non-shock cold working pressure 250°F maximum operating temperature

CONFORMS TO MSS-SP67 ◆ MSS-SP25 ◆ API-609 ◆ NSF/ANSI/CAN 61-8 COMMERCIAL HOT 180°F AND NSF/ANSI/CAN 372

### **MATERIAL LIST**

	PART	SPECIFICATION						
1.	Stem	Stainless Steel ASTM A 582 Type 416						
2.	Collar Bushing	Brass ASTM B 124						
3.	Stem Seal	EPDM Rubber						
4.	Body Seal	EPDM Rubber						
5.	Nameplate	Aluminum						
6.	Upper Bushing	Wrot Copper ASTM B 75 Alloy C12200						
7.	Liner	EPDM Rubber						
8.	Disc	Alum. Brz. ASTM B 148 Alloy 954/955						
9.	Lower Bushing	Wrot Copper ASTM B 75 Alloy C12200						
10.	Body Lug	Ductile Iron ASTM A 536						
11.	Flange Body (2)	Carbon Steel						
12.	Flange Gasket (2)	EPDM						
13.	Flange Press Ends (2)	Wrot Copper ASTM B 75 Alloy C12200						
14.	Crimp Evident Seal (2)	EPDM - Leak Detection						
15.	Cap Screws	Carbon Steel						

Available with lock lever handle or gear operator.

# **DIMENSIONS — WEIGHTS**

Size							G	Metal	Rubber
In. mm	. A	В	С	D	E	F	Flat	Н	I
2½ 65	2.90	4.69	1.25	5.88	3.27	.38	.370	1.812	1.938
3 80	3.15	5.12	1.25	6.12	3.40	.38	.370	1.812	1.938
4 100	4.09	6.12	1.25	6.88	4.00	.38	.403	2.062	2.188

Si	ze	J	N	0	Р	R	s	Lug	Total Weight
<u>In.</u>	mm.	Square	Dia.	B.C.	Dia.	Dia.	No.	Length	Lbs. Kg.
21/2	65	3.25	.562	3.25	.437	.500	3.13	Refer to	24.00 10.88
3	80	3.25	.562	3.25	.437	.500	3.44	page 68 for bolt	26.00 11.78
4	100	3.25	.625	3.25	.437	.562	4.00	lengths	38.00 17.23

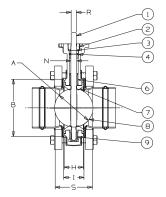
NIBCO Press System butterfly valves are designed to meet MSS SP-67 with the exception of the end connection. Male and female press-to-connect ends are new technology not yet covered in the current edition of this specification.

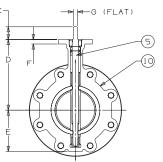
WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

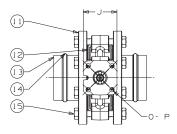












NOT RECOMMENDED FOR STEAM SERVICE



# **NIBCO®** Press System Bronze Ball Valves

Two-Piece Body • Full Port • Bronze Trim • Blowout-Proof Stem



# Bar non-shock cold working pressure Maximum Pressure/Temperature: 200 psi at 250°F

CONFORMS TO MSS SP-110

# **MATERIAL LIST**

		W/ CI EII// CE EIO I
	PART	SPECIFICATION
1.	Handle Nut	Zinc Plated Steel
2.	Handle Assembly	Zinc Plated Steel with Plastisol Cover
3.	Pack Gland	Brass ASTM B 16 Alloy C36000
4.	Packing	PTFE
5.	Stem	Silicon Bronze ASTM B 371 Alloy C69430 or B371 Alloy C69300
6.	Thrust Washer	RPTFE
7.	Ball	Brass ASTM B 16 Alloy C36000 or ASTM B 124 Alloy C37700 (Chrome/Nickle Plated)
8.	Seat Ring (2)	RPTFE
9.	Body	Bronze ASTM B 584 Alloy C84400
10.	Body End Piece	Bronze ASTM B 584 Alloy C84400
11.	Stub Out (2)	Type "L" Copper Tube

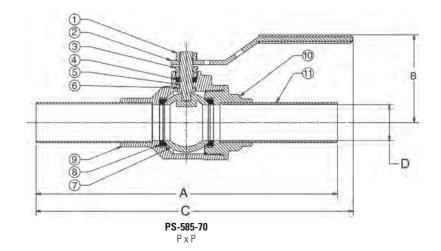


Press x Press Male End

# **DIMENSIONS—WEIGHTS**

			Dimensions						_		
S	ize		A B		В	C		D		Weight	
ln.	mm	In.	mm.	ln.	mm.	ln.	mm.	In.	mm.	Lbs.	Kg.
1/2	15	6.56	167	1.88	48	7.25	184	.50	13	.73	.99
3/4	20	7.25	184	2.25	57	8.25	210	.75	19	1.50	.68
1	25	7.75	197	2.38	60	8.63	219	1.00	25	2.05	.93
1 1/4	32	9.06	230	3.00	76	9.19	233	1.25	32	3.64	1.65
1 1/2	40	9.99	254	3.16	80	11.69	297	1.50	38	5.73	2.60
2	50	10.72	272	3.50	89	12.06	306	2.00	51	8.11	3.68

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 200 psi CWP to match the NIBCO Press System. Male and female press-to-connect ends are new technology not yet covered in the current edition of this specification.





# **NIBCO®** Press System Bronze Ball Valves

Two-Piece Body • Full Port • Stainless Trim • Blowout-Proof Stem • Vented Ball



Bar non-shock cold working pressure

Maximum Pressure/Temperature: 200 psi at 250°F

CONFORMS TO MSS SP-110/145

# **MATERIAL LIST**

	PART	SPECIFICATION							
1.	Handle Nut	Zinc Plated Steel							
2.	Handle Assembly	Zinc Plated Steel with Plastisol Cover							
3.	Pack Gland	Brass ASTM B 16 Alloy C36000							
4.	Packing	PTFE							
5.	Stem	ASTM A 276 Alloy S31600 Stainless Steel							
6.	Thrust Washer	RPTFE							
7.	Ball	ASTM A 276 Alloy S31600 Stainless Steel							
8.	Seat Ring (2)	RPTFE							
9.	Body	Bronze ASTM B 584 Alloy C84400							
10.	Body End Piece	Bronze ASTM B 584 Alloy C84400							
11.	Stub Out (2)	Type "L" Copper Tube							

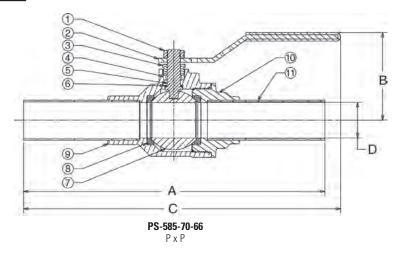


Press x Press Male End

# **DIMENSIONS—WEIGHTS**

			Dimensions								
S	ize		A		В	(	C	ı	D	W	eight
ln.	mm.	In.	mm.	ln.	mm.	ln.	mm.	ln.	mm.	Lbs.	Kg.
1/2	15	6.56	167	1.88	48	7.25	184	.50	13	.73	.33
3/4	20	7.25	184	2.25	57	8.25	210	.75	19	1.50	.68
_1	25	7.75	197	2.38	60	8.63	219	1.00	25	2.05	.93
1 1/4	32	9.06	230	3.00	76	9.19	233	1.25	32	3.86	1.75
1 ½	40	9.99	254	3.16	80	11.69	297	1.50	38	5.79	2.63
2	50	10.72	272	3.50	89	12.06	306	2.00	51	8.84	4.00

NIBCO Press end ball valves are designed to MSS SP-110 with the exception of Press connections are designed to MSS SP-145. Valves with Press ends are rated to align with NIBCO Press System max pressure.





# **NIBCO®** Press System Bronze Ball Valves

Two-Piece Body • Full Port • Bronze Trim • ¾" Hose Connection with Cap and Retainer • Blowout-Proof Stem

# Bar non-shock cold working pressure Maximum Pressure/Temperature: 200 psi at 250°F

CONFORMS TO MSS SP-110/145

### **MATERIAL LIST**

	PART	SPECIFICATION
1.	Handle Nut	Zinc Plated Steel
2.	Handle	Zinc Plated Steel
3.	Pack Gland	Brass ASTM B 16 Alloy C36000
4.	Packing	PTFE
5.	Thrust Washer	RPTFE
6.	Stem	Silicon Bronze ASTM B 371 Alloy C69430
7.	Ball	Brass ASTM B 16 Alloy C36000 or ASTM B 124 Alloy C37700 (Chrome/Nickle Plated)
8.	Seat Rings	Reinforced PTFE
9.	Body Assembly	Bronze ASTM B 584 Alloy C84400
10.	Hose Body End	Brass ASTM B 124 Alloy C37700
11.	Hose Cap Assembly*	Die Cast Brass, EPDM Gasket, Soft PVC Retainer
12.	Stub Out	Type "L" Copper Tube

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

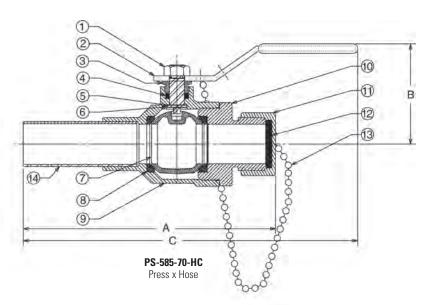


PS-585-70-HC Press Male x Hose End

# **DIMENSIONS—WEIGHTS**

	Dimensions								
Si	ize		4	ı	В	(		W	eight
In.	mm.	In.	mm.	ln.	mm.	ln.	mm.	Lbs.	Kg.
1/2	15	4.90	124	1.88	48	7.19	183	.81	.37
3/4	20	5.47	139	2.25	57	8.25	210	1.54	.70

NIBCO Press end gate valves are designed to MSS SP-110 with the exception of Press connections designed to MSS SP-145. Valves with Press ends are rated to align with NIBCO Press System max pressure.





# **Class 125 Bronze Y-Strainers**

Screw-In Cap • Tapped Cap with Blow-Off Plug or Solid Cap • 20 Mesh SS Screen or SS Perforated Screen • Press Ends Leak Detection

200 psi/13.8 bar non-shock cold working pressure 250° F maximum operating temperature

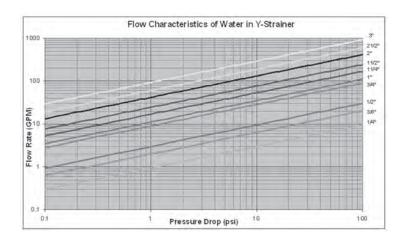
# **MATERIAL LIST**

	= != =							
PART	SPECIFICATION							
1. Body	Bronze ASTM B584 Alloy C84400							
2. Cap	Bronze ASTM B62 Alloy C83600							
3. Gasket	PTFE							
4. Screen	ASTM E2016 20 Mesh - 304 Stainless Steel or ASTM E674 Perforated - 304 Stainless Steel							
5. Plug	Brass ASTM B16 Alloy C36000 or Bronze ASTM B584 Alloy C84400							
6. Female Adapter (2)	Wrot Copper ASTM B75 Alloy C12200							
7. O-Ring (2)	EPDM - Leak Detection							

END CONNECTION	SCREEN	CAP
PF- Female Press	221 - 20 Mesh (STD.)	A - Tapped Cap w/Plug (STD.)
PF - Female Press	222 - Perforated	B - Solid Cap

# **DIMENSIONS—WEIGHTS—QUANTITIES**

	Dimensions									
S	ize		Α		C	D	We	ight_		
In.	mm.	In.	mm.	In. mm.		Threads	Lbs.	Kg.		
1/2	15	3.08	78	1.80	46	1/4 NPT	0.66	0.30		
3/4	20	4.13	105	2.15	55	3/8 NPT	1.21	0.55		
_1	25	4.84	123	2.81	71	3/8 NPT	1.88	0.86		
11/4	32	5.64	143	3.26	83	3/4 NPT	3.10	1.41		
11/2	40	6.23	158	3.64	93	3/4 NPT	4.64	2.10		
2	50	7.75	197	5.02	128	1 NPT	7.48	3.39		

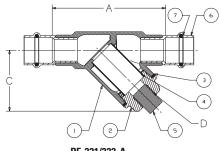


WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.



# PF-221/222-A

Press x Press Female End

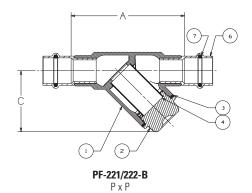


**PF-221/222-A** 



# PF-221/222-B

Press x Press Female End





# **NIBCO®** Press System Ball Valve Handle Options

A wide variety of handles are available to fulfill safety and operation requirements in various processing and manufacturing industries. The lever handle with plastic cover is standard. Other handle options are shown. Stainless steel lever handles are available, as an option, also with plastic covers. If an optional handle is desired, please indicate which one when ordering. Many of these options are field assembly only.





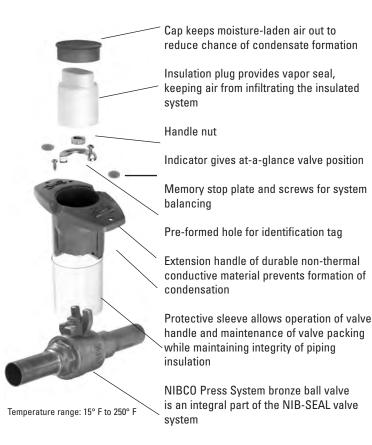
# NIBCO® Press System Bronze Ball Valves NIB-SEAL® Technical Data

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

The revolutionary NIB-SEAL 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 for typical commercial HVAC systems as well as industrial applications where insulated piping is desirable.

- Protective sleeve provides a stationary surface to affix the insulation, allowing operation and maintenance of the valve without
  destroying the integrity of the insulated system.
- High-strength cylindrical handle design features easy access to standard adjustable memory stop for system balancing. The valve packing is also readily accessible for routine maintenance.
- 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.
- · Pre-formed hole allows for convenient tagging.



US PATENT 5,236,006

# **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  $\frac{1}{8}$ " 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.

# LOCKING DEVICE works with padlock\* or cable lock\* CAP keeps moisture-laden air out to reduce chance of condensate formation INSULATION PLUG provides vapor seal, reducing air infiltrating the system LOCKING MECHANISM EXTENSION HANDLE of durable non-thermal conductive CPVC prevents formation of condensation PREFORMED HOLE for identifica-

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

tion tag

PROTECTIVE SLEEVE allows operation of valve handle and maintenance of valve packing while maintaining integrity of pip-

Visit our website for the most current information.

ing insulation

**NIBCO BALL VALVE** 



	Series 585								
Sizes	-	A	E	3	С				
	In.	mm.	In.	mm.	ln.	mm.			
1/4"	2.19	55.63	4.25	107.95	5.30	134.62			
3/8"	2.19	55.63	4.25	107.95	5.30	134.62			
1/2"	2.19	55.63	4.25	107.95	5.42	137.67			
3/4"	2.19	55.63	4.25	107.95	5.69	144.53			
1"	2.19	55.63	4.25	107.95	5.88	149.35			
11/4"	3.38	85.85	6.50	165.10	6.84	173.74			
1½"	3.38	85.85	6.50	165.10	7.06	179.323			
2"	3.38	85.85	6.50	165.10	7.30	185.42			

Series 595								
Sizes	l l	A	E	3	С			
	In.	mm.	ln.	mm.	In.	mm.		
1/4"	2.19	55.63	4.25	107.95	5.20	132.08		
3/8"	2.19	55.63	4.25	107.95	5.20	132.08		
1/2"	2.19	55.63	4.25	107.95	5.20	132.08		
3/4"	2.19	55.63	4.25	107.95	5.47	138.94		
1"	2.19	55.63	4.25	107.95	5.66	143.76		
11/4"	3.38	85.85	6.50	165.10	6.62	168.15		
11/2"	3.38	85.85	6.50	165.10	6.84	173.74		
2"	3.38	85.85	6.50	165.10	7.08	179.83		

Factory installed only.

Order appropriate factory installed NIBCO valve figure number with suffix "LX". Example: T-585-70-LX, ½"

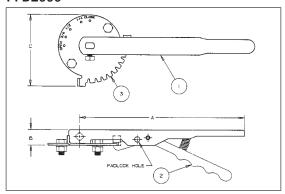
NIB-SEAL on solder/sweat ball valves are shipped unassembled.





# **Butterfly Valve Options and Accessories**

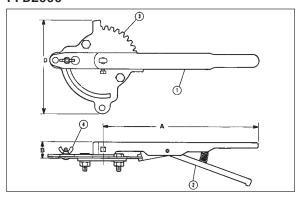
# **Lever-Lock Operator (Standard)** PFD2000



The lever-lock handle and throttling plate provide throttling notches every 100 for excellent manual control in balancing up to 900 or shut off service. The valve may be padlocked in any one of the positions including opened or closed by virtue of a locking hole located in the handle and lever.

# **Position-Lock Operator (Optional)**

PFD2000



The position-lock can be used to set the valve in any position or as a memory stop so the valve may be reopened to the previous position. The valve may be padlocked in full open or full closed position.

Ordering: Sold as a field retrofitable kit only.

### **MATERIAL LIST**

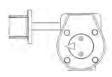
	PART SPECIFICATION
1. Handle	Polymer Coated Iron
2. Lever-Lock	Zinc Plated Steel
3. Throttle Plate	Zinc Plated Steel

### **DIMENSIONS AND TORQUE OUTPUT**

PFD				Dimensions				Torque Rated Output in Inch-Pounds		
Lever	Lever	Throttle Plate/								
Size	(STD)	(STD)	Infinite Pos. Kit	Α	В	C	D	At 60 pounds Pull	At 100 pounds Pull	
21/2"-3"	T115107PP	T115138PP	T114841FG	101/2	1	4/8	<b>6</b> 3/16	540 In-Lbs.	900 In-Lbs.	
4	T115108PP	T115138PP	T114842FG	101/2	1	4/8	<b>6</b> 3/16	540 In-Lbs.	900 In-Lbs.	

# Gear Operator options and accessories (2 1/2" through 4" 2000 series only)

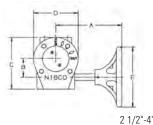
2" Square Operating Nut





Flag Indicator







Consult factory for: square operating nut, memory stop and flag indicator

# **Cast Iron Gear Operator**

The NIBCO® butterfly valve can be provided with heavy-duty operator and indicator. Recommended for valves 8" and larger, for trouble-free operation in all moisture and weather conditions (not submersible). Operator is a self-locking worm gear type. Equipped with adjustable stops at open and shut positions. Ordering: Specify by adding (-5) to Fig. No., i.e., PFD2000-5. Babbit sprocket may be added to handwheel. See below for sizing information. Available options: memory stop gear operator kit, 2" square operating nut, flag indicator and handwheel for GO.

GEAR OPERATOR DETAIL FOR SIZES 2 1/2" TO 4" (PFD2000 ONLY)						GEA	R OPERATOR	ACCESSORIES	S & REPLACEN	MENT PARTS					
PFD VALVE	GEAR OPERATOR	RATIO	GEAR OP	ı	DIMENSIONS (INCHES)		STEM Adapter	SPROCKET RIM	SQUARE OPERATING	FLAG INDICATOR	MEMORY STOP KIT	REPLACEMENT HANDWHEEL			
VALVE	NUMBER		WEIGHT	Α	В	C	D	E	F	BUSHING	MODEL	NUT	INDICATOR	STUPKII	HANDWHEEL
2½ - 3	T117118PP	24:1	10	7.64	1.77	5.04	4.24	5.91	2.79	T046653PP	#11/2	T117792FC	T116682PP	T026196PP	T117122PP
4	T117118PP	24:1	10	7.64	1.77	5.04	4.24	5.91	2.79	T046654PP	#11/2	T117792FC	T116682PP	T026196PP	T117122PP

NOTE: 1. Stem adapter bushing must be ordered seperately when needed for smaller size valves.

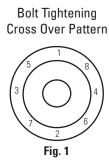
- 2. All other accessories must be ordered separately. (Sprocket rim, square operator nut, flag indicator & memory stop kit.)
- 3. Gear operator comes with handwheel.



# **Butterfly Valve Technical Information**

Table 4 Recommended Bolt Lengths

VALVE SIZE 1000/2000/3000 SERIES ONLY	TOTAL VALVE BODY WIDTH	ANSI B16.1 CLASS 125 CAST IRON FLANGE THICKNESS	ANSI B16.5 CLASS 150 STEEL FLANGE THICKNESS	ANSI B1647 (SERIES A) CLASS 150 STEEL MSS SP-44 FLANGE THICKNESS	ANSI B16.47 (SERIES B) CLASS 150 STEEL WELD NECK FLANGE THICKNESS	ANSI B1647 (SERIES B) CLASS 150 STEEL BLIND STYLE FLANGE THICKNESS	RECOMMENDED CAP SCREW LENGTH (LUGGED VALVES) (C)	TOTAL QUANTITY CAP SCREWS/BOLTS (TO MOUNT 2 FLANGES)	CAP SCREW SIZE
0.1/0"	1.01	0.69	_	_	_	_	1.50	8/4	E /O 11 LINIO
2 1/2"	1.81	_	0.88	_	_	_	1.75	8/4	5/8-11 UNC
0.11	1.01	0.75	_	_	_	_	1.50	8/4	E /O 11 LINIO
3"	1.81	_	0.94 —		_	_	1.75	8/4	5/8-11 UNC
4"	2.06	0.94	0.94	_	_	_	1.75	16/8	5/8-11 UNC



# **Resilient Liner Materials**

**EPDM** – EPDM is a terpolymer elastomer made from ethylene-propylene diene monomer. EPDM has good abrasion and tear resistance and offers excellent chemical resistance to a variety of acids and alkalines. It is susceptible to attack by oils and is not recommended for applications involving petroleum oils, strong acids or strong alkalines. EPDM should not be used on compressed air lines. It has exceptionally good weather aging and ozone resistance. It is fairly good in ketones and alcohols.

**Liner Temperature Ratings** 

**Liner Material Temperature**EPDM\*\*
-20°F to + 250°F

Proprietary compound formulas are used for each of the elastomers to provide the right combination of seat compression, abrasion resistance and chemical resistance to match your application. Elastomeric seat materials are not suitable for steam service.

<sup>\*\*</sup> EPDM is rated at 250°F intermittent service and 225°F continuous service.



# NIBCO pressystem Tools, Jaws & Chains





# **NIBCO®** Press System Tools

# PC-280 32kN

1/2" through 4"



# **MATERIAL LIST**

MODEL	NO. DESCRIPTION	LBS.
PC-280	32kN pressing Tool with 2 - 18V, 3.0 Ah Lithium-ion batteries, 110V battery charger & case	25.40
PC-10S	1/2" Standard Pressing Jaw (for 32kN PC-100 or PC-280)	
PC-11S	3/4" Standard Pressing Jaw (for 32kN PC-100 or PC-280)	4.18
PC-12S	1" Standard Pressing Jaw (for 32kN PC-100 or PC-280)	4.52
PC-13S	1 1/4" Standard Pressing Jaw (for 32kN PC-100 or PC-28	
PC-14S	1 1/2" Standard Pressing Jaw (for 32kN PC-100 or PC-28	0)9.61
PC-15S	2" Standard Pressing Jaw (for 32kN PC-100 or PC-280)	9.26
PC-16S	1/2"-1 1/4" (4 jaws) Standard Press Jaw Kit w/Case (for 32kN PC-100 or PC-280)	25.25
PC-17S	1 1/2"-2" (2 jaws) Standard Press Jaw Kit w/Case (for 32kN PC-100 or PC-280)	23.76
PC-2	2 1/2" Pressing Chain w/Case (for 32kN PC-100 or PC-2	80)18 58
PC-3	3" Pressing Chain w/Case (for 32kN PC-100 or PC-280)	19.40
PC-4	4" Pressing Chain w/Case (for 32kN PC-100 or PC-280)	23.81
PC-234 44.42	2 1/2", 3" & 4" Pressing Chain Kit (for 32kN PC-100 or PC-2	?80)
PC-5	PC-5 Pressing Chain Adapter Jaw	
	(note: must be used with 2 1/2", 3" & 4" chains)	7.01
PC-7L	18V, 3.0Ah Lithium-ion Battery (for 32kN PC-280 or 15kN PC-20N	1) 1.30
PC-8L	110V Battery Charger (for PC-4ML or PC-7L)	2.20
PC-9L	AC Adapter (for 32kN PC-280 or 15kN PC-20M)	1.70
PC-280C	Plastic Replacement Case for 32kN PC-280 Tool	7.50
PC-2C	Metal Replacement Case for PC-2 or PC-3 Chain	8.10
PC-4C	Metal Replacement Case for PC-4 Chain	8.10
PC-234C	Plastic Replacement Case for PC-234 Chain Kit	7.72
PC-16SC	Metal Replacement Case for PC-16S (1/2" - 1 1/4" Jaws)	8.10
PC-17SC	Metal Replacement Case for PC-17S (1 1/2" - 2" Jaws)	4.40
PC-51	1/2" - 2" Deburring Tool	0.92



PC-10S thru PC-15S

Standard Pressing Jaws





PC-2 thru PC-4
Pressing Chains



Pressing Chain Adapter Jaw



**PC-7L** 18V, 3.0 Ah Lithium-ion Battery



**PC-8L** 110V Battery Charger



PC-51 1/2" - 2" Deburring Tool



AC Adapter

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.

Visit our website for the most current information.

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## **NIBCO®** Press System Tools

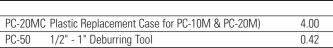
#### **PC-20M 15kN**

1/2" through 1"

#### **MATERIAL LIST**

	1717 11 21117 12 210 1	
MODEL	NO. DESCRIPTION	LBS.
PC-20M	15kN Mini Pressing Tool, 2 - 18V, 2.0 Ah Lithium-ion batteries, 110V charger & case (NO jaws)	10.42
PC-200M	15kN Mini Pressing Tool, 3 Jaws, 2 - 18V, 2.0 Ah Lithium-ion batteries, 110V charger & case	17.47
PC-1M	1/2" Jaw (for 15kN Mini Pressing Tool - PC-10M or PC-20M)	2.09
PC-2M	3/4" Jaw (for 15kN Mini Pressing Tool - PC-10M or PC-20M)	2.05
PC-3M	1" Jaw (for 15kN Mini Pressing Tool - PC-10M or PC-20M)	2.07
PC-4ML	18V, 2.0Ah Lithium-ion Battery (for 15kN PC-20M)	0.85
PC-7L	18V, 3.0Ah Lithium-ion Battery (for 32kN PC-280 or	
	15kN PC-20M)	1.30
PC-8L	110V Battery Charger (for PC-4ML and PC-7L)	2.20
PC-9L	AC Adapter (for 32kN PC-280 or 15kN PC-20M)	1.70
·		•
PC-20MC	Plastic Replacement Case for PC-10M & PC-20M)	4.00







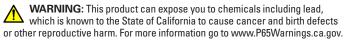
PC-1M, 2M, 3M Mini Pressing Jaws



PC-4ML 18V, 2.0 Ah Lithium-ion Battery



PC-7L 18V, 3.0 Ah Lithium-ion Battery





**PC-20M** 15kN Mini Pressing Tool



15Kn Mini Pressing Tool with 1/2", 3/4" and 1" Jaws



PC-8L 110V Battery Charger



PC-50 1/2" - 1" Deburring Tool



PC-9L AC Adapter



AHFAD OF THE FLOW

## **NIBCO®** Press System Tools

## 32KN PC-280 & 15KN PC-20M FEATURES

#### **TOOLS**

#### Light weight

15kN PC-20M Mini: 3.7 lbs. (without jaw) 32kN PC-280: 9.4 lbs. (without jaw)

#### Easy to handle / simple design

Jaws rotate 350°
No calibration necessary
No complicated switches or controls
Mini: Ergonomic compact design is easy to use
in tight spaces

#### Interruptible crimp cycle

Safety feature prevents injuries Can begin crimp, stop to align and level fitting / tube, and complete crimp

#### Battery

Can be changed during crimp cycle Lithium-ion has short charging cycle and larger capacity

- PC-4ML: 15 minute recharge time
- PC-7L: 22 minute recharge time

#### AC Power Adapter

Converts the tool to electric power Allows continuous use

#### Service light

Illuminates at 10,000 cycles

Tool will not stop operating when light illuminates

- RED indicates battery charge status, service intervals, tool functions & faults
- WHITE illuminates the work area

#### Hydraulic Pressure Check (HPC)

An audible warning signal sounds if adequate working pressure is not achieved

#### PRESSING CHAINS (2 1/2" to 4" ONLY)

#### **Uniform crimp**

Maintains proper pipe alignment

#### Easy to install and remove

Once secured to fitting, chain cannot fall off prior to crimp Chain easily removed post crimp

#### **Crimp Identification**

Easy to identify crimp has been made from a distance

#### PC-100 and PC-10M Accessories

#### **MATERIAL LIST**

MODEL	NO. DESCRIPTION	LBS.
PC-7	12V, NiMH Battery - 3.0Ah for PC-100	1.57
PC-8L	110V Battery Charger (for PC-4ML and PC-7L)	2.20
PC-4M	1.3 Ah NiCd 9.6V Battery for 15kN Mini Pressing Tool	0.85
PC-5M	120V Charger for 15kN Mini Pressing Tool	1.13
PC-100C	Metal Case for PC-100 Tool	14.30



**PC-4M** 9.6V, 1.3 Ah NiCd Battery



PC-7 12V, 3.0 Ah NiMH Battery



**PC-8L** 120V Battery Charger



## **NIBCO®** Press System **Approved Tool and Jaw Compatibility Matrix**

Pressing tool, jaw and chain sets are an integral part of ensuring a reliable, permanent connection between NIBCO Press System fittings, valves and copper piping.

Only use pressing tools, jaws and chain sets that have been tested and approved for use with NIBCO Press System fittings and valves.

The following table details
compatibility of <b>approved</b>
pressing tools, chains and
jaws with the NIBCO Press
System fittings and valves:

com pres jaw	patibility of <b>approved</b> ssing tools, chains and s with the NIBCO Press tem fittings and valves:	1/2" - 1" NIBCO® Press Sytem Pressing Jaws (PC-1M, PC-2M, PC-M	1/2" - 1 1/4" Milwaukee® M12 <sup>TM</sup> Pressing Jaws	1/2" & 3/4" RIDGID® ProPress® Compact Pressing Jaws	1/2" - 1" RIDGID® ProPress® Compact Pressing Jaws	1/2" - 1 1/4" RIDGID® ProPress® C1 Compact Kit (C1 Actuator & Press Rings)	Rothenberger Compact Pressing Jav	Stanley® VIRAX® Press Inserts	DEWALT® DCE200 Standard Press Tool Jaws	1/2" - 2" NIBCO® Press System Standard Pressing Jaws (PC-10S, PC-1 PC-12S, PC-13S, PC-14S, PC-15S)	DEWALT® DCE210 Compact Press Tool Jaws	1/2" - 2" Milwaukee® M18 <sup>TM</sup> Pres: System Standard Pressing Jaws	1/2" - 2" RIDGID® ProPress® Press System Standard Pressing Jaws	1/2" - 2" RIDGID® ProPress® V1 & V. Standard Kits (Actuator & Press Ring	1/2" - 2" DEWALT® DCE200 Press System Standard Pressing Jaws	1/2" - 2" REMS® Press System Standard Pressing Jaws	1/2" - 2" Rothenberger® Press Syste Standard Pressing Jaws	DEWALT® DCE200 Standard Press Tool Jaws	1/2" - 2" Stanley® VIRAX® Press Syst Standard Pressing Jaws	21/2" - 4" NIBCO® Pressing Chain (PC-5 Adaptor &, PC-2, PC-3, PC-4 Chains)	Milwaukee Tool 2 $1\%$ – $4$ " NIBCO press rings and adapter
	SIZE				1/2" -	1¼″								1/2" -	2"					<b>2</b> ½"	- 4"
	NIBCO® PC-10M 15kn Mini	YES	_	_	_	_	YES	_	_	<u> </u>	_	_	_	_	_	_	_	_		_	
	NIBCO® PC-20M 15kn Mini	YES	_	_	_	_	YES	_	_	_	_	_	_	_	_	_	_	_	_	_	_
S	Milwaukee® M12™	_	YES	<u> </u>	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_	_
00	RIDGID® RP 115	_	_	YES	_	_		$\overline{}$	_	_	_	_	_	_	_	_	_	_	_	_	_
Compact Pressing Tools	RIDGID® 100-B Compact		_	_	YES	YES	_		ı	_	_	_		_		_	_	_		_	_
essi	RIDGID® RP200-B Compact	_	_	_	YES	YES	_		_	_	_	_	_	_	_	_	_	_		_	_
t Pro	RIDGID® RP210-B Compact		_	_	YES	YES	_		-	_	_	_	_	_	_	_	_	_		_	_
pac	RIDGID® RP240 Compact	_	_	_	YES	YES	_	_	_	_	_	_	_	_	_	_	_	_		_	_
mo:	RIDGID® RP241 Compact		_		YES	YES	_	_	_					_	_			_			_
3	Rothenberger® Compact	YES	_		_		YES	_	_			_	_	_	_	_		_	_	_	_
	Stanley® VIRAX® M20+ Compact	_	_	_	_		_	YES	_		_	_	_	_	_	_	_	_	_		
	DEWALT® DCE210	_	_		_		_	_	YES		_	_	_	_	_	_	_	_	_	_	
	NIBCO® 32kN PC-100	_	_	_	_	_	_	_	_	YES	_	YES	YES	YES	YES	YES	YES	_	YES	YES	_
	NIBCO® 32kN PC-280		_		_		_	_	_	YES	_	YES	YES	YES	YES	YES	YES	_	YES	YES	_
	Milwaukee® M18™ Force Logic™		_		_		_	_	_	YES		YES		_	_			_			_
	Milwaukee® M18™ Force Logic™ (Long Throw)	_	_	_	_	_	_	_	_	YES	_	YES	_	_	_	_	_	_	_	_	YES
	RIDGID® CT 400	_	_	_	_	_			_	YES	_	_	YES	YES	_	_	_	_	_		_
	RIDGID® RP 320-E		_	_	_	_	_		_	YES	_	_	YES	YES	_	_	_	_		_	_
ools	RIDGID® RP 330-B		_		_		_	_	_	YES		_	YES	YES	_	_		_	_	_	_
Standard Pressing Tools	RIDGID® RP 330-C	_	_	_	_		_	_	_	YES	_	_	YES	YES	_	_	_	_	_		_
SSil	RIDGID® RP 340	_	_	_	_	_	_	_	_	YES	_	_	YES	YES	_	_	_	_	_		_
Pre	RIDGID® RP 342 XL	_	_	_	_	_	_	_	_	YES	_	_	YES	YES	_	_	_	_	_	_	_
lard	RIDGID® RP 350	_	_	_	_	_	_	_	_	YES	_	_	YES	YES	_	_	_	_	_	_	
tand	RIDGID® RP 351	_			_	_	_	_	_	YES	_	_	YES	YES	_	_	_	_	_	_	
S	DEWALT® DCE200	_	_		_	_	_	_	_	YES	_	_	_	_	_	_	_	_	_		
	REMS® Akku-Press	_			_	_	_		_	_	_	_	_	_	YES	_	_	_	_	_	
	REMS® Power-Press		_	_	_	_	_	_	_		_	_	_	_	_	YES	_	_			
	Rothenberger® ROMAX® Pressliner		—	—	—		_		_			_	_	_	_	YES	YES	_			
	Rothenberger® ROMAX® AC ECO	_	—	—	—		_		_			_	_	_	_	_	YES	_			
	Stanley® VIRAX® P20+		_		_			_	_			_						_	YES		
	DEWALT® DCE200			<u> </u>			-	_	_				_	_				YES	_	_	_

For the latest listing of approved pressing tool, jaw and chain combinations, visit nibco.com. NIBCO recommends minor tool service performed once per year and major service every three years. For technical or service assistance, contact NIBCO Technical Services 1-888-446-4226.

RIDGID® is a registered trademark of RIDGID, Inc.

ProPress® is a registered trademark of Viega GmbH & Co

ROMAX® is a regis-tered trademark of ROTHENBERGER

 $\pmb{\text{VIRAX}}^{\circledR} \text{ is a registered trademark of Stanley Works}$ 

Milwaukee® is a registered trademark of Milwaukee Electric Tool Corporation

FORCE LOGIC™ is a registered trademark of Milwaukee Electric Tool Corporation

**DEWALT®** is a registered trademark of The Black & Decker Corporation

#### **CAUTION:**

- NIBCO press fittings and valves (2½", 3", 4" ends)to be installed ONLY with NIBCO pressing tools & chains.
- Webstone press valves and fittings (21/2", 3", 4" ends) to be installed ONLY with XLC pressing tools & jaws.







# NIBCO® Press System — Engineering Data Copper and Copper Alloy Fittings

#### **Standards**

O-ring seal joints are not new to the piping industry, but joining techniques like the NIBCO Press System are providing new alternatives for copper piping assembly. NIBCO has relied on its century of experience in copper and brass piping products to design the best performing and most dependable line of fittings possible.

#### **Applications**

The NIBCO Press System fittings are designed to join with ASTM B 88 seamless copper water tube in hard drawn/half-hard condition, Type K, L, and M; as well as, with annealed tubing in 1/2", 3/4" and 1" sizes for residential and commercial potable, hot, chilled and process water applications for plumbing and HVAC systems. Copper and copper alloy materials and EPDM elastomeric seals have a long history of compatibility with common chemicals used in these systems. A chemical resistance chart should always be referenced when other fluids are to be introduced.

## NOTE: FLUIDS CONTAINING HYDROCARBON-BASED OILS ARE <u>NOT</u> COMPATIBLE WITH THE EPDM SEAL.

#### **Pressure/Temperature Limitations**

-20°F to 250°F up to 200 psig, non-shock working pressure except where otherwise noted.

#### **Materials:**

- Wrot Copper
  - ASTM B 75 Alloy C12200
- Cast Copper Alloy
  - ASTM B584 Alloy C87600 and C84400
- Elastomeric Seals
  - EPDM 0-rings compliant with IAPMO Z1117 and ASME B16.51

NIBCO® press fittings meet all performance requirements of ASME B16.51



Flow area consistent with ASME B16.22

NOTE: Freezing weather precaution — subsequent to testing a piping system, valve should be in an open position to allow complete drainage.

#### Thermal Expansion and Contraction

Thermal expansion and contraction should be accounted for in all system designs. Further guidance on how to account for these stresses can be found in The Copper Development Association's Copper Tube Handbook, Section 3.

#### **Performance**

The following performance tests were conducted per ASME B16.51. The fitting dimensions, materials of construction and performance tests were witnessed and verified by internationally recognized NSF. A letter of verification is available upon request:

- 1. Dimensional Verification
  - a. Inside diameter of press cup and waterway
  - b. Outside diameter of press cup and waterway
  - c. Wall thickness
  - d. Threaded ends conformance to ASME B1.20.1
- 2. Hydrostatic Minimum Burst Strength Pressure
  - Fitting samples hydrostatically tested to a minimum of 600 psi (three times the rated internal working pressure) at 73°F.
- 3. Unrestrained Hydrostatic Pressure Test at 68°F (20°C) and 200°F (93°C)
  - Fitting assemblies were filled with water and pressurized to 600 psiG at 68° and 200°F for 48 hours.
- 4. Static Torque
  - Fittings were filled with water, had a minimum torque applied and released. Each fitting was then pressurized to 400 psiG for 48 hours.
- 5. Bending Test
  - a. A sample fitting was installed between two equal lengths of hard-drawn copper tubing supported six (6) feet apart. A concentrated load was applied to the center of the fitting. The 1/2" thru 2" assemblies were subjected to 600 psiG water pressure and 2-1/2" thru 4" were subjected to 400 psi water pressure for one (1) hour at 68°F (20°C).
- 6. Vacuum Pressure Test
  - Fittings were subjected to a vacuum pressure of 24.5 inches of mercury for one (1) hour at 68°F (20°C).
- 7. Cyclic Pressure Test
  - Fittings were subjected to a hydraulic shock pressure of 400 psiG for 10,000 cycles.
- 8. Vibration Test
  - a. Fitting assemblies were subjected to a hydrostatic cyclic vibration test at 400 psiG and 2-1/2" thru 4" were subjected to 400 psi water pressure for 1,000,000 cycles. After cycling, the 1/2" thru 2" assemblies were pressurized to 600 psiG for 30 minutes and 2-1/2" thru 4" were pressurized to 400 psi for 48 hours.
- 9. Thermocycling Test
  - a. Test assemblies were constructed using type L copper tube and press connect fittings. The test assemblies were subjected to flowing water at 145 psi cycled between 68°F (20°C) and 200°F (93°C) for a period of 15 minutes at each temperature for nominal size 2" and smaller. Nominal size 2 1/2" and larger were pressurized with air and immersed in water at 68°F (20°C) and 200°F (93°C). Cycling continued for 5,000 cycles for sizes 2" and smaller and 2,500 cycles for 2 1/2" and larger size fittings.
- 10. Dynamic Torque at 68°F (20°C) and 200°F (93°C)
  - a. Fittings were assembled between two lengths of hard-drawn copper tubing. With one tube fixed, the other tube twisted ±5° for 10,000 cycles at 68°F (20°C) or 200°F (93°C). Each assembly was then subjected to 400 psiG water pressure at 68°F (20°C) or 200°F (93°C) for 1 hour.

Tests were performed with K and M hard drawn tubing. The thermocycle test used L hard drawn tube.



## **NIBCO®** Press System — Sample Specification

#### **FITTINGS**

#### 2" and Smaller:

Fittings shall comply with NSF 61, CSA, UPC and be approved by the local jurisdiction. The NIBCO Press System may be used at the contractor's option for the following building services piping - 20°F to +250°F up to 200 psi:

- Hot and Cold Domestic Water
- Potable Water
- Condenser and Chilled Water Service
- Hot Water Heating Service

Wrot copper press fittings shall be made from commercially pure copper mill products per ASTM B 75 Alloy C12200. Cast copper alloy press fittings shall be made from materials with a minimum of 78% copper and a maximum of 15% zinc. The press fittings connections shall be compatible with seamless K, L or M copper tube made to ASTM B 88 as well as 1/2", 3/4" and 1" annealed copper tubing. Fittings shall have a maximum non-shock working pressure of 200 psi between the temperatures of -20°F and +250°F. Elastomeric seals shall be made of EPDM material, and the fittings shall be manufactured with an inboard bead design. All fittings shall be installed in accordance with the manufacturer's installation instructions and according to local plumbing and mechanical codes. The press-to-connect joint shall be made with pressing tools and jaw sets recommended and authorized by NIBCO.

#### 21/2" through 4":

Fittings shall comply with NSF 61, CSA, UPC and be approved by the local jurisdiction. The NIBCO Press System may be used at the contractor's option for the following building services piping - 20°F to +200°F up to 200 psi:

- Hot and Cold Domestic Water
- Potable Water
- Condenser and Chilled Water Service
- Hot Water Heating Service

Wrot copper press fittings shall be made from commercially pure copper mill products per ASTM B 75 Alloy C12200. Cast copper alloy press fittings shall be made from materials with a minimum of 78% copper and a maximum of 15% zinc. The press fittings connections shall be compatible with seamless K, L or M copper tube made to ASTM B 88. Fittings shall have a maximum non-shock working pressure of 200 psi between the temperatures of -20°F and +250°F. Elastomeric seals shall be made of EPDM material, and the fittings shall be manufactured with an inboard bead design. All fittings shall be installed in accordance with the manufacturer's installation instructions and according to local plumbing and mechanical codes. The press-to-connect joint shall be made with pressing tools and jaw sets recommended and authorized by NIBCO.

## **NIBCO®** Press System — Sample Specification

#### **VALVES**

#### 2" and Smaller Ball Valves: (on/off, isolation or throttling)

Ball valves with male or female press-to-connect ends shall be rated at 200 psi CWP to +250°F maximum. Valves shall be manufactured in accordance with MSS SP-110 and constructed of dezincification resistant cast bronze bodies. No brass containing more than 15% zinc shall be approved. Valve shall have reinforced PTFE seats, blow-out proof stem, full-port ball, chrome/nickel plated ball or 316 SS ball for aggressive water conditions. Where piping is to be insulated, ball valves shall be equipped with 2" extended handles of non-thermal conductive material. Handle to have extended sleeve incorporating an insulation plug to provide a vapor barrier and allow valve operation without disturbing the insulation, and a memory stop, which can be set after installation.

#### Acceptable Valves: (non-insulated lines):

NIBCO® PC585-70, PF585-70 or PS585-70 (chrome/nickel plated ball)
NIBCO® PC585-70-66, PF585-70-66, PS585-70-66 or PCM585-60 (316 SS ball)

#### Acceptable Valves: (insulated lines):

NIBCO® PC585-70-NS, PF585-70-NS or PS585-70-NS (chrome/nickel plated ball)
NIBCO® PC585-70-66-NS, PF585-70-66-NS or PCM585-60-NS (316 SS ball)

(Note to Specifier: Include press gate valves in addition/in lieu of press ball valves for ON/OFF and isolation services if requested or required.)

#### 2" and Smaller Gate Valves: (On/Off and Isolation)

Gate valves with male or female press-to-connect ends shall be rated to 200 psi CWP at +250°F maximum. Valves shall be manufactured in accordance with MSS SP-80. Valve body, bonnet and wedge to be manufactured of dezincification resistant cast bronze (ASTM B 62). Stems shall be of silicon bronze (ASTM B 371) or low zinc alloy (ASTM B 99). Non-asbestos packing and malleable or ductile iron hand-wheel shall be standard.

#### **Acceptable Valves:**

NIBCO® PF111 or PS111 - rising stem gate valve NIBCO® PF113 or PS113 - non-rising stem gate valve

#### 2" and Smaller Globe and Angle Valves: (Throttling Service)

Globe and angle valves with male or female press-to-connect ends shall be rated to 200 psi CWP at +250°F maximum. Valves shall be manufactured in accordance with MSS SP-80. Valve body, bonnet and wedge to be manufactured of dezincification resistant cast bronze (ASTM B 62). Stems shall be of silicon bronze (ASTM B 371) or low zinc alloy (ASTM B 99). Non-asbestos packing and malleable or ductile iron hand-wheel shall be standard.

#### **Acceptable Valves:**

NIBCO® PF211-Y or PS211-Y - globe valve NIBCO® PF311-Y or PS311-Y - angle valve

#### 2" and Smaller Check Valves: (Back Flow Prevention)

Check valves (Y pattern, swing type or in-line) with male or female press-to-connect ends shall be rated at 200 psi CWP to +250°F maximum. Valves shall be manufactured in accordance with MSS SP-80. Body and cap to be manufactured of dezincification resistant cast bronze (ASTM B 62 or ASTM B 584 Alloy C84400). Valves to have PTFE seat disc.

#### **Acceptable Valves:**

NIBCO® PF413-Y or PS413-Y - Y pattern, swing type check valve NIBCO® PF480-Y or PS480-Y - in-line spring loaded silent check valve

#### **Drain Valves**

At all low points in water piping to be drained or vented, provide 1/2" or 3/4" ball valves with male or female press-to-connect ends by hose-end drain valves. Valves shall be rated by 200 psi CWPto+250°F maximum. Valves shall be manufactured in accordance with MSS SP-110. Valves to be constructed of dezincification resistant cast bronze bodies. Valve shall have reinforced PTFE seats, blow-out proof stem, and be full port. All valves shall be provided with 3/4" hose connection with cap and chain.

#### **Acceptable Valves:**

NIBCO® PS585-70-HC or PF585-70-HC

#### 2 1/2" thru 4" Butterfly Valves: (On/Off, Isolation or Throttling)

Butterfly valves with female press-to-connect ends shall be rated at 200 psi CWP to +250°F maximum. Valves shall be manufactured in accordance with MSS SP-67 and constructed of a ductile-iron body, for bubble-tight shutoff, extended-neck for insulation, disc and lining suitable for potable water, valves shall be suitable for bi-directional dead end service at full rated pressure, one-piece Type 416 stainless-steel stem, copper bushing, fasteners and pins shall not be used to attach stem to disc, no pins or fasteners in waterway, aluminum-bronze disc, and molded-in EPDM seat (liner).

#### **Acceptable Valves:**

NIBCO® PFD2000 series





#### **NIBCO Press System**

The NIBCO Press System, when used with tested and authorized pressing tools and jaws, is designed to mechanically crimp fittings and valves onto copper tubing to create a watertight, permanent seal. When the switch on the pressing tool is depressed a small hydraulic pump generates thousands of pounds of crimping force to install the specially designed fittings and valves.

#### **System Components**

#### **Fittings and Valves**

NIBCO Press System copper or bronze fittings and valves

#### **Tubing**

ASTM B 88 seamless Hard Drawn Copper Water Tube: Types K, L and M as well as 1/2", 3/4" and 1" annealed copper tubing.

#### **Pressing Tools, Chains and Jaws**

The pressing tool, chain and jaw are important parts of ensuring a reliable, permanent connection between NIBCO Press System fittings and valves and the copper water tube.

**CAUTION** — Use only pressing tools and jaw sets that have been tested and authorized for use with NIBCO Press System fittings and valves <sup>(1)</sup>. Use of unauthorized pressing tools and/or jaws may result in an improper seal that could cause extensive property damage.

(1) See approved tool and jaw compatibility matrix in this catalog.

#### **Pressing Tool Safety**

- Only use authorized pressing tools and jaws with NIBCO Press System fittings and valves. Other uses or modification of the jaws for other applications may damage the press tool, damage the jaws and/or cause personal injury.
- Keep fingers and hands away from jaws during pressing cycle. Your fingers or hands can be crushed, fractured or amputated if they become caught between the jaw tips or between the jaw and any other object.
- Always wear safety glasses while using pressing tools and jaws.
- Never attempt to repair a damaged jaw set. A jaw that has been modified in any manner can fail during crimping resulting in serious injury. Discard the entire damaged jaw set. Replace with a new jaw set.

**WARNING:** Please read these installation instructions and the manufacturer's pressing tool and jaw operators manual(s) carefully prior to installation of the NIBCO Press System. Failure to understand and follow the contents of this manual may result in extensive property damage, severe personal injury or death.

Please contact NIBCO Technical Services at 888.446.4226 if you have installation questions.

#### **Chemical Compatibility**

Please consult the most current edition of the NIBCO Chem-Guide for recommendations regarding chemical compatibility of material exposure to specific media and media-treatment additives. The NIBCO Chem-Guide is a general guide on the topic of chemical compatibility and is by no means an exhaustive resource on the subject. Ultimately, proper material selection is the responsibility of the installer and/or end-user, taking into account all aspects of a system's design and intended use.

#### **Galvanic Potential in Piping Systems**

Galvanic corrosion or dissimilar metal corrosion is an electrochemical process that is created through the electrical interaction of two different metals under the influence of a conductive media (i.e. an electrolyte). An electrolytic cell, much like a battery, is generated by these dissimilar metals using water as the electrolyte. The electrical charge, developed within the electrolytic cell, drives a preferential attack on the more electrically active metal with the water acting as the recipient of the discarded metal ions. Such galvanic attack is often encountered in service where iron or steel components are installed, and later corrode, in a largely copper piping system. Please consult NIBCO Technical Bulletin NTB-0714-01 Dielectric Products Relative to Electrolysis and Galvanic Corrosion.



AHFAD OF THE FLOW

## **NIBCO®** Press System — Installation Instructions

## Installation Instructions for 1/2" - 2" Press Fittings and Valves

**WARNING:** To prevent serious injury, inspect the pressing tool, battery charger (if applicable) and jaw sets according to the procedure outlined in the pressing tool instruction manual prior to beginning installation.

Failure to clean jaws can result in an improper connection that can lead to extensive property damage.

#### **Preparing the Copper Tube**

 Select clean, undamaged copper tube and cut to desired length. Cut tube end square using a tube cutter or fine-toothed saw. Do not crimp over damaged, scratched, gouged, or otherwise damaged tubing ends. Do not crimp over etch print streams on tubing. (Figure 1).



Figure 1 — Cut tube to desired length

- 2. Deburr the tube inside and outside diameter using a half-round file or a deburring tool.
- 3. Clean the tube <u>end</u> of all dirt, oil and grease. (Emery cloth or sandpaper to clean the tube or remove oxidation <u>should not be used</u>.)

#### Inserting the Tube into the Fitting or Valve

1. Check the fitting to make sure the EPDM seal is in place, clean and free of dirt and debris (Figure 2).



Figure 2 — Check for EPDM Seal

**WARNING:** Never lubricate the EPDM seal in the NIBCO Press System fitting or valve with anything other than water. Oil-based lubricant, dirt or debris may damage the seal. An improper seal can lead to extensive property damage.



Figure 3 — Marking for Insertion Depth

- 2. Mark the tube with a permanent marker to indicate the proper tube insertion depth (Figure 3).
- 3. Refer to the minimum insertion depth table for correct depths
- 4. Insert the tube into the fitting or valve using a twisting motion. Make sure that the tube is fully inserted into the fitting stop or shoulder.

Tube Size	Insertion D	Pepth (min.)
Inches	Inches	mm
1/2	11/16	18
3/4	7/8	22
1	7/8	22
11/4	1	25
11/2	1¾	35
2	11/2	38

**CAUTION:** Tubing that is difficult to insert may have burrs or could be out-of-round. Burrs must be removed and tubing end must be undamaged. Make sure tube is inserted to the proper depth. Failure to do so may result in an improper seal.

#### **Attaching Pressing Jaws**

- 1. Make sure the battery is removed or the cord is unplugged on the pressing tool prior to attaching or changing the crimp jaws.
- 2. Push and twist to open the jaw set mounting pin. (Figure 4).



Figure 4 — Pushing and twisting to open the jaw set mounting pin

3. If press tool contains a jaw set, slide it out of the crimping tool.



4. Select the jaw set that corresponds to the size of the joint to be crimped and insert the jaw set into the pressing tool (Figure 5).



Figure 5 — Inserting the NIBCO Press System jaw

Push the jaw set mounting pin until it clicks into position.NOTE: The tool will not properly press unless the pin is fully engaged.

#### **Crimping a NIBCO Press System Fitting or Valve**

 Make sure the tubing is inserted to the proper depth in the fitting. (Figure 6).

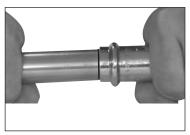


Figure 6 — Inserting the tube to proper depth

- 2. Squeeze jaw arms to open the jaw set.
- 3. Place the open jaws around the fitting and ensure that the contour of the jaw is properly aligned with the contour of the fitting (*Figure 7*).



Figure 7 — Open the jaw set and place around the fitting

4. Make sure the tool is perpendicular to the tubing and depress the switch (Figure 8). Keep the trigger depressed from the time the cycle begins and the rollers contact the jaw arms until the end of the entire crimp cycle.



Figure 8 — Jaw set should be square to tubing

5. Once the crimp is complete, press the jaw arms to open the jaw and remove from the fitting.

If the tool displays an LED flash or emits an audible alarm, please refer to the tool instruction manual for troubleshooting suggestions.

**CAUTION** Avoid handling sharp edges that may have formed on the fitting during the crimping operation.

#### **Inspecting the Crimp**

1. Inspect the crimped fitting to ensure proper crimp

NOTE: The use of the NIBCO Press System jaw will produce a unique witness mark "N" on the crimped fitting.

- Inspect the crimped fitting checking the connection for the following problems:
  - Not fully inserted tube, double check depth marks
  - Incorrect jaw alignment with the fitting contour

If any problems are found, a new section of tubing and a new fitting will need to be prepared, installed and crimped.

3. Test the NIBCO Press System in accordance with crimp intergrity testing instructions for fittings and valves in this catalog.



AHFAD OF THE FLOW

## **NIBCO®** Press System — Installation Instructions

## Installation Instructions for 2 1/2" - 4" Press Fittings and Valves

**WARNING:** To prevent serious injury, the pressing tool, battery charger (if applicable) and pressing chains should be inspected according to the procedure outlined in the pressing tool instruction manual prior to beginning installation.

Failure to clean pressing chains can result in an improper connection that can lead to extensive property damage.

#### **Preparing the Copper Tube**

 Select clean, undamaged copper tube and cut to the desired length. Cut tube end square using a tube cutter or fine-toothed saw. Do not crimp over damaged, scratched, gouged, or otherwise damaged tubing. Do not crimp over etch print streams on tubing (Figure 1).



Figure 1: Cut tube to desired length using s tube cutter

2. Deburr the tube inside diameter using a half-round file or deburring tool. Remove any copper shavings or filings (Figures 2 & 3).



Figure 2: Deburr inside diameter using a half-round file



Figure 3: Deburr inside diameter deburring tool

3. Deburr the tube outside diameter using a half-round file to prevent damage to the EPDM seal (Figure 4).



Figure 4: Deburr outside diameter using a half-round file

4. Clean the tube <u>end</u> of all contamination, oils and shavings. A smooth transition chamfer is recommended to ease tube insertion past the seal. (Emery cloth or sandpaper to clean the tube or remove oxidation **should not be used**.)

#### Inserting the Tube into the Fitting or Valve

 Check the fitting to make sure that the seal is in place and is free of oil or grease. Only original NIBCO® EPDM seals are to be used when making a press connection with NIBCO Press System fittings and valves. If it is necessary to lubricate the seals, use water only. **DO NOT** use any petroleum-based lubricants (Figure 5).



Figure 5: Check for EPDM seal

**WARNING:** Never lubricate the EPDM seal in a NIBCO Press System fitting or valve with anything other than water. Oil-based lubricants, dirt or debris may damage the seal. An improper seal can lead to extensive property damage.

Mark the proper insertion depth on the tube with a permanent marker <u>prior</u> to insertion, based on insertion depth chart. Refer to minimum insertion depth table for correct depths.

NIBCO® Press System Insertion Depth Chart									
Tube Size	21/2"	3″	4"						
Insertion Depth (min.)	11/2"	1 <sup>5</sup> /8"	21/8"						

3. Insert the tube into the fitting or valve using a twisting motion. Make sure that the tube is fullly inserted into the fitting or valve.

**WARNING:** If tube is not inserted to the proper depth, an inadequate seal may result.

**CAUTION:** Tubing that is difficult to insert may have burrs or could be out-of-round. Burrs must be removed and tubing end should be undamaged. Make sure tube is inserted to the proper depth. Failure to do so may result in an improper seal.



#### **Crimping a NIBCO Press System Fitting or Valve**

#### **CAUTION:**

NIBCO press fittings and valves (2½", 3", 4" ends) to be installed **ONLY** with:

- NIBCO PC-100 and PC-280 pressing tools
- NIBCO PC-5 adapter jaw
- NIBCO pressing chain 2½" (PC-2), 3" (PC-3), 4" (PC-4)
- 1. Make sure that the battery is removed or that the cord is unplugged on the pressing tool prior to attaching or changing the adapter jaw.
- 2. Select the correct size pressing chain. Pull the pin on the chain which allows the segments to open. Position the chain on the raised bead and wrap the chain around the fitting with the "pipe side" designation facing the tube. When the chain is fully wrapped around the fitting, reinsert the pin to secure the chain on the assembled joint. Visually inspect the mark made for insertion depth, to ensure the tube remained in position (Figure 6).



Figure 6: Placement of the pressing chain onto fitting or valve

3. Release the pin (push and twist) on the jaw holder of the pressing tool, and install the adapter jaw on the tool. Return the pin to its original position, securing the jaw. The red sleeve on the tool must be in the back position to allow for crimping sizes 2½", 3" and 4" (Figure 7).



Figure 7: Placement of adapter jaw into the tool

4. Squeeze adapter jaw arms to open the jaw. Rollers must be fully retracted to open the adapter jaw. Place the open adapter jaw into the grooves in the pressing chain and let go of the jaw arms (Figure 8).



Figure 8: Placement of adapter jaw into pressing chain

- 5. Make sure the tubing is inserted to the proper depth in the fitting or valve, and that the tube and fitting or valve are aligned properly.
- With the pressing tool perpendicular to the tube, begin the pressing cycle by pulling the trigger of the pressing tool.
- 7. Keep the trigger depressed from the time the cycle begins and the rollers contact the jaw arms until the end of the entire cycle. Remove the pressing tool and adapter jaw from the pressing chain. Remove the pressing chain from the fitting.

If the tool displays an LED flash or emits an audible alarm, please refer to the toolinstruction manual for troubleshooting suggestions.

**CAUTION:** Avoid sharp edges that may have formed on the fitting during the crimping operation.

#### **Inspecting the Crimp**

1. Inspect the crimped fitting or valve to ensure proper crimp. The final crimp should appear pressed uniformly around the fitting or valve (Figure 9).



Figure 9: Inspection of final crimp

NOTE: The use of the NIBCO Press System chain will produce a unique witness mark "N".

- 2. Inspect the crimped fitting checking the connection for the following problems:
  - Not fully inserted tube, double check depth marks
  - Incorrect chain alignment with the fitting contour

If any problems are found, a new section of tubing and a new fitting will need to be prepared, installed, and crimped.

3. Test the NIBCO Press System in accordance with crimp integrity testing instructions for fittings and valves in this catalog.



## NIBCO® Press System — Crimp Integrity Testing Instructions for Fittings & Valves

#### PRESSURE TESTING:

NIBCO recommends the following leak testing procedures when installing NIBCO Press System with the leak detection feature. These test procedures allow the installer to find un-pressed connections while the system is being tested under pressure. The uniquely designed EPDM o-ring allows fluids or gases to flow past the seal and leak when the fitting has not yet been pressed. When the fitting has been pressed, the o-ring will create a water tight seal around the tube.

#### **AIR LEAK TESTING:**

- 1. Pressure system slowly increasing to a maximum of 15 psi maximum using dry, oil free compressed air, carbon dioxide, or nitrogen.
- 2. Allow system pressure to stabilize for a minimum of 2 hours.
- 3. If system pressure has dropped, add more air to bring entire system up to 15 psi maximum. If system pressure increases above 15 psi, bleed off excess pressure to ensure system is at a maximum pressure of 15 psi.
- 4. If the system pressure continues to drop, inspect all joints for un-pressed fittings. The NIBCO Press System press fittings with the leak detection feature are designed to leak in an un-pressed condition.
- 5. Check all press joints for air leaks using a commercially available leak test solution or a soap and water mixture. Do not use a soap that contains Mineral Spirits or a Hydrocarbon/petroleum that might attack the EPDM 0-rings.
- 6. Once the system has been confirmed to be leak free, pressure can be increased to the recommended working pressure to verify system integrity.

#### **WATER LEAK TESTING:**

- 1. Pressurize system up to 50 psi maximum using potable water.
- 2. Allow system pressure to stabilize for a minimum of 2 hours.
- 3. If system pressure has dropped, add more water to bring entire system up to 50 psi maximum. If system pressure increases above 50 psi, bleed off excess pressure to ensure system is at a maximum pressure of 50 psi.
- 4. If the system pressure continues to drop, inspect all joints for un-pressed fittings. The NIBCO Press System press fittings with the leak detection feature are designed to leak in an un-pressed condition.
- 5. Check all press joints for leaking water.
- 6. Once the system has been confirmed to be leak free, water pressure can be increased to the recommended working pressure to verify system integrity.

#### **SYSTEM INTEGRITY TESTING\*:**

**Once a system has been confirmed to be properly installed and no press connections have been left uncrimped**, the system is recommended for testing up to the maximum non-shock working pressure as indicated in the Press Fittings Applications Chart reported in this catalog.

NOTE: While NIBCO Press System products are tested to pressures as high as 600 psi, the product system rating limitation of 200 psi is in place to ensure a safety factor of three-times proof-testing according to ASME B16.51 Copper and Copper Alloy Press-Connect Pressure Fittings.

#### **SYSTEM INTEGRITY TESTING AT HIGHER PRESSURES\*:**

NIBCO Press System products can be tested at hydrostatic pressures higher than 200 CWP, not exceeding a maximum pressure of 300 psi hydrostatic for a maximum test duration of 24 hours, when assembled and tested according to the methods prescribed above.

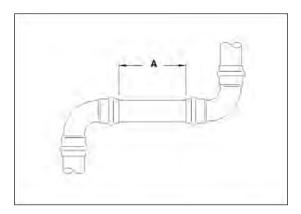
**CAUTION:** These testing parameters and protocols apply only to NIBCO products as detailed above: NIBCO accepts no responsibility or liability for any other manufacturer's products that may be damaged as a result of such testing.

\*System integrity testing applies to leak detect and non-leak detect fittings and valves



#### **Minimum Distance Between Joints**

To prevent distortion of the tubing, certain fitting sizes require a minimum distance between crimp joints (refer to *Chart 1* below). Failure to provide this minimum distance may result in an improper seal.



	Α	A (min.)					
Tube Dia.	Inches	mm					
1/2"*	0	0					
3/4**	0	0					
1"*	0	0					
11/4"*	0	0					
1½"*	0	0					
2" <del>*</del>	0	0					
21/2"	3/8"	10					
3"	3/8"	10					
4"	3/8"	10					

<sup>\*</sup>No minimum distance required.

#### **System Support**

**CAUTION** — In any installation, the system should be suported to ensure the minimum stress is imposed on the tube and joints. The NIBCO Press System should be supported in accordance with normal practice and to local jurisdiction piping code.

#### **Softening of Copper Tubing**

A NIBCO Press System installation should not be conducted within 12" of a **brazed** joint. The high temperature required for capillary joinery may cause the copper tube to become annealed and render it too soft for proper crimping. However, a NIBCO Press System product may be crimped adjacent to a **soldered** joint, as normal temperatures created by silver soldering are not hot enough to cause the copper tube to become annealed.

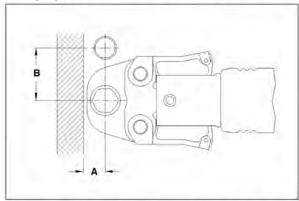
**CAUTION** — Brazing or soldering should not be conducted within 12" of an existing NIBCO Press System connection as this may damage the HNBR seal. If there is any concern about heat damage to the 0-ring, a cold, wet cloth should be wrapped around the crimped connection prior to soldering or brazing.

#### **Spacing**

 Sufficient clearance must be left around each joint to allow room for the pressing tool and jaw to be attached without interference.

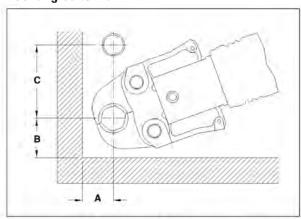
Clearance Requirement — NIBCO Standard Sets

#### Tool perpendicular to wall



T.I. D:	A (m	in.)	B (min.)	
Tube Dia.	Inches	mm	Inches	mm
1/2	<sup>15</sup> /16	24	1 <sup>5</sup> /8	41
3/4	7/8	22	21/8	54
1	11/4	31	21/2	64
11/4	11/8	29	27/8	73
$1^{1}/_{2}$	2	51	43/8	111
2	2	51	43/8	111

#### Tool angled to wall



Tube Dia.	A (m	nin.)	B (m	in.)	C (min.)			
lube bia.	Inches	mm	Inches	mm	Inches	mm		
1/2	11/8	28	1 <sup>3</sup> / <sub>8</sub>	35	21/2	64		
3/4	1	26	11/2	38	21/2	64		
1	1 <sup>5</sup> / <sub>16</sub>	34	13/4	45	3	76		
11/4	11/4	32	21/4	57	31/8	80		
$1^{1}/_{2}$	21/8	54	31/8	80	5	127		
2	21/8	54	31/8	80	5	127		
$2^{1}/_{2}$	41/2	114	411/16	119	61/8	156		
3	43/4	121	5	128	6 <sup>7</sup> /8	175		
4	5 <sup>1</sup> / <sub>4</sub>	134	511/16	145	<b>7</b> <sup>7</sup> /8	200		

NOTE: Clearance dimensions for  $2^1/2^{\shortparallel}$ , 3" & 4" are for wrapping pressing chains around fittings.



## **NIBCO®** Press System — Frequently Asked Questions

#### What is the NIBCO product offering?

NIBCO Press System features a full range of copper and copper alloy fittings, commercial valves, accessories and pressing tools, jaws and chains for use with K, L and M copper water tube as well as 1/2", 3/4" and 1" annealed copper tubing.

#### What is the system temperature rating?

NIBCO Press System is rated at 200 psiG over a temperature range of -20°F to 250°F.

#### What are the approved system applications?

Approved applications include residential and commercial potable, hot, chilled and process water for plumbing and HVAC systems. NIBCO Press System is designed for use with water glycol mixtures of ethylene or propylene glycol up to 50% at 200°F.

#### What was the testing protocol for NIBCO Press System fittings and valves?

NIBCO Press System fittings and valves were subjected to a wide range of performance tests including dimensional verification, thread end specification, hydrostatic burst strength, unrestrained pressure, static torque, bending, vacuum pressure, cyclic pressure, vibration, thermo-cycling and dynamic torque. The testing protocol included testing to a 3X safety factor above the 200 psiG system rating.

NIBCO testing was witnessed and validated by the internationally recognized NSF.

#### Can other available pressing tools and jaws be used on the NIBCO Press System?

See our Approved Tool and Jaw Compatibility Matrix for a complete listing of approved tools and jaws.

#### Can a NIBCO Press System connection be re-crimped?

If for any reason the press cycle is interrupted, it is possible to re-crimp a NIBCO Press System connection. However, when re-crimping the connection, the jaws <u>must</u> be properly aligned so that the crimp is performed in the same location as the original.

#### How long will the EPDM seal last?

Accelerated life tests show that the EPDM seals used with NIBCO Press System fittings and valves have a life expectancy of 50 years.

#### Are NIBCO Press System fittings available with solder or threaded by Press System connection?

NIBCO offers many Press System fitting combinations by soldered or threaded connection. Please note, always solder the standard wrot connection first when possible. Prior to soldering, remove the press end EPDM o-ring, solder, allow the fitting to cool, insert the EPDM O-ring, and then Press the connection.

#### Can a fitting be soldered close to a Press System connection?

NIBCO recommends soldering at least 12 inches away from the Press System connection. If this length is not possible, either solder the joint prior to connecting the press fitting or wrap the connection with a cold wet cloth.

#### Is NIBCO Press System approved for underground use?

In accordance with local plumbing codes, NIBCO Press System can be installed underground.

#### Is NIBCO Press System compatible with standard disinfectant cleaning agents commonly utilized in a new water system?

With regard to cleaning and/or disinfecting any copper piping system, NIBCO recommends following the general guidelines offered by the Copper Development Association (see Commissioning and Disinfecting Copper Plumbing Systems for details at www.copper.org.)



## **NIBCO®** Press System Limited Warranty

#### **NIBCO INC. LIMITED WARRANTY**

Applicable to NIBCO Press System

NIBCO INC. warrants each NIBCO Press System fitting and flange 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 fifty (50) years from the Warranty Commencement Date. The Warranty Commencement Date shall be the date of installation.

NIBCO Press System pressure rated metal 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, except for model PC-FP-600A-LF for which a period of two (2) years from the Warranty Commencement Date shall apply. The Warranty Commencement Date shall be the date of installation.

NIBCO Press System tools to be free from defects in materials and workmanship under normal use, service, and maintenance in accordance with the product specifications for a period of two (2) years from the date of purchase.

NIBCO Press System fittings, flanges, valves, and tools are referred to herein as "NIBCO Products."

NIBCO will repair or replace – at its option and at no charge –NIBCO Products 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.

This limited warranty applies to all NIBCO Products 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 NIBCO Product which is used for purposes other than a purpose authorized by NIBCO;
- any NIBCO Product not installed, tested, applied, used, or maintained in accordance with NIBCO's recommended installation guidelines and instructions;
- 4. any NIBCO Product 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 NIBCO PRODUCTS 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.



## **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

To the best of our knowledge, the information contained in this publication is accurate. However, NIBCO does not assume any liability whatsoever for the accuracy or completeness of such information. Final determinations of the suitability of any information or product for the use to be contemplated is the sole responsibility of the user. The manner of that use, and whether there is any infringement of patents, is also the sole responsibility of the user.





## **Global Locations**



#### **Metal Fittings & Valves**

Blytheville, Arkansas McAllen, Texas Nacogdoches, Texas Stuarts Draft, Virginia Worcester, Massachusetts

## Plastic Pipe, Valves, & Fittings

Goshen, Indiana Greensboro, Georgia

#### International

Lodz, Poland Reynosa, Mexico



#### **INTERNATIONAL OFFICES**

#### **World Headquarters**

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