

AHEAD OF THE FLOW®





NIBCO[®] Press System

Business-to-Business Solutions

Look to NIBCO for technology leadership.

The velocity with which e-business evolves demands that new products and services be continuously developed and introduced to keep our customers at the center of our business efforts. NIBCO provides an entire suite of business-to-business solutions that is changing the way we interact with customers.



NIECO

NIBCOpartner.comsm is an exclusive set of secure web applications that allow quick access to customer-specific information and online order processing. This self-service approach gives you 24/7 access to your order status putting you in total control of your business.

Real time information includes:

- Online order entry
- Viewable invoices & reports
- Inventory availability
- Current price checks
- Order status
 - Online library of price sheets, catalogs & submittals

Electronic Data Interchange (EDI) makes it possible to trade business documents at the speed of light. This technology cuts the cost of each transaction by eliminating the manual labor and paper-work involved in traditional order taking. This amounts to cost-savings, increased accuracy and better use of resources.

With EDI, you can trade:

- Purchase orders
- PO Acknowledgements
- Invoices

- Product activity data
- Advanced ship notices
- Remittance advice

Vendor Managed Inventory (VMI), a sophisticated service for automated inventory management, reduces your overhead by transferring inventory management, order entry and forecasting to NIBCO. This is an on-going, interactive partnership with NIBCO.

Through automation, VMI brings results:

- Improves customer service
- Optimum inventory efficiencies
- Better forecasting

- Cuts transaction costs
- Peace of mind
- Relief from day-to-day management





NIBCC

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



NIBCO pressystem®

Quick and Easy

The 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

The 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

The 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 110-year-old company and a 50-year written guarantee.

Approvals, Standards and Performance

The 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 16.51 Performance • International Residential Code[®] (IRC) • International Plumbing Code[®] (IPC) • International Mechanical Code[®] (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 PS 117, Copper, Copper Alloy, Carbon Steel, and Stainless Steel Piping System with Press-Type and Nail-Type Connections ICC-ES LC1002, Press-Connection Fittings for Potable Water Tube and Radiant Heating Systems ½" thru 2" ASME B16.51, Copper and Copper Alloy Press-Connect Pressure Fittings NSF/ANSI 61, Drinking Water Systems Components—Health Effects NSF/ANSI 372, Drinking Water Systems Components—Lead Content.

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

Applications

The 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

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

Joint Integrity

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



NIBCO pressystem Fittings



AHEAD OF THE FLOW®

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 | | 200 psi | -20°F to 250°F | • |
| Hydronic Heating | Up to 50% Ethylene Glycol/Propylene Glycol solution appropriate for the application temperature range | 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 ³ Oil Content | 200 psi | Up to 140°F | • |
| Oxygen - O ₂ (non-medical) | Keep Oil and Fat Free/Non-Liquid O2 | 140 psi | Up to 140°F | • |
| Nitrogen - N ₂ | | 200 psi | Up to 140°F | • |
| Argon | Welding Use | 200 psi | Ambient | • |
| Hydrogen - H ₂ | | 125 psi | Up to 250°F | • |
| Vacuum | | Max 29.2 in. of Mercury-Hg | Up to 140°F | • |
| Carbon Dioxide - CO ₂ | Dry | 200 psi | Up to 140°F | • |
| Low Pressure Steam | | 15 psi | Up to 250°F | • |

ADAPTERS





| NOM. SIZE | APPROX. NET WT./LBS. | DIM. A INCHES |
|---------------|-------------------------|-------------------------------|
| 1/2 | .103 | ¹³ /16 |
| 1/2 x 3/8 | .081 | ²¹ / ₃₂ |
| 1/2 x 3/4 | .151 | ³¹ /32 |
| 3/4 | .158 | ²⁷ /32 |
| 3/4 x 1/2 | .153 | ²⁵ /32 |
| 1 | .237 | ¹⁵ /16 |
| 1 x 1/2 | .172 | 3/4 |
| 1 x 3/4 | .217 | 13/16 |
| 1 x 1 1/4 | .436 | 1 ³ /16 |
| 1 1/4 | .372 | 1 ¹ /16 |
| 1 1/4 x 1 | .359 | 1 ¹ /16 |
| 1 1/4 x 1 1/2 | .425 | 1 ⁷ /32 |
| 1 1/2 | .518 | 1 ¹ /16 |
| 1 1/4 x 2 | .276 | 1 |
| 1 1/2 x 1 1/4 | .515 | 1 |
| 2 | .672 | 1 |
| 2 1/2 | 1.222 | 1 ¹³ /32 |
| 3 | 1.756 | 1 ²³ /32 |
| 4 | 3.238 | 1 ⁷ /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 ¹⁷ /32 |
| 1/2 | 0.096 | 1 ³ /4 |
| 1/2 x 3/4 | 0.132 | 1 ²⁷ / ₃₂ |
| 3/4 x 1/2 | 0.107 | 1 ²⁵ /32 |
| 3/4 | 0.145 | 1 ⁷ /8 |
| 1 x 1/2 | 0.146 | 2 |
| 1 | 0.220 | 2 ¹ /16 |
| 1 1/4 x 1/2 | 0.193 | 2 ³ /16 |
| 1 1/4 | 0.322 | 2 ³ /8 |
| 1 1/2 | 0.431 | 2 ²¹ /32 |
| 2 | 0.683 | 2 ¹⁵ /16 |
| | | |



PC604 Adapter P x M

| Adapter P x I | 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 | ²⁷ / ₃₂ | | |
| 1/2 x 3/4 | .191 | 1 ¹ /4 | | |
| 3/4 | .180 | 1 ¹ /16 | | |
| 3/4 x 1/2 | .189 | ³¹ /32 | | |
| 3/4 x 1 | .268 | 1 ³ /16 | | |
| 1 | .255 | 1 ³ /32 | | |
| 1 x 3/4 | .253 | 1 ¹ /32 | | |
| 1 x 1 1/4 | .457 | 1 ¹⁷ /32 | | |
| 1 1/4 | .467 | 1 ¹³ /32 | | |
| 1 1/4 x 1 | .335 | 1 ³ /16 | | |
| 1 1/4 x 1 1/2 | .537 | 1 ¹ /2 | | |
| 1 1/2 | .696 | 1 ¹ /2 | | |
| 1 1/2 x 1 1/4 | .603 | 1 ³ /8 | | |
| 1 1/2 x 2 | .784 | 1 ⁷ /16 | | |
| 2 | .856 | 1 ⁷ /16 | | |
| 2 x 1 1/2 | 1.087 | 1 ¹⁹ /32 | | |
| 2 1/2 | 1.322 | 1 ²⁷ /32 | | |
| 3 | 2.104 | 2 ¹ /8 | | |
| 4 | 3.298 | 2 ⁹ /32 | | |



Extended Adapter FTG x M – Wrot

| NOM. SIZE | APPROX. NET WT./LBS. | DIM. B INCHES |
|-----------|-------------------------|---------------------|
| 1/2 x 3/8 | 0.056 | 1 ³ /4 |
| 1/2 | 0.101 | 1 ²⁹ /32 |
| 1/2 x 3/4 | 0.145 | 2 ¹ /16 |
| 3/4 x 1/2 | 0.100 | 1 ¹⁵ /16 |
| 3/4 | 0.136 | 2 ¹ /16 |
| 1 x 3/4 | 0.175 | 2 ¹ /16 |
| 1 | 0.243 | 25/16 |
| 1 1/4 | 0.408 | 217/32 |
| 1 1/2 | 0.530 | 27/8 |
| 2 | 0.782 | 311/32 |

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 |
| 1 1/4 | .171 | ³ /32 |
| 1 1/2 | .314 | ³ /32 |
| 2 | .493 | ³ /32 |
| 2 1/2 | .476 | ⁷ /32 |
| 3 | .713 | ⁷ / ₃₂ |
| 4 | 1.491 | 1/4 |
| | | |

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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 |
| 1 1/4 | .271 | 5/32 |
| 1 1/2 | .530 | ³ /16 |
| 2 | .691 | 5/32 |
| 2 1/2 | .669 | 1/8 |
| 3 | .979 | ¹ /8 |
| 4 | 2.134 | ⁷ /32 |



А

PC600-RS Coupling P x P – Wrot

| NOM. SIZE | APPROX. NET WT./LBS. | DIM. A INCHES |
|-----------|-------------------------|------------------|
| 2 1/2 | .688 | 1/8 |
| 3 | .979 | 1/8 |
| 4 | 2.134 | 7/32 |

COUPLINGS (Cont.)



PC600-R Reducing Coupling P x P – Wrot

| noudoing oor | apinig i Ai | VVIOL |
|---------------|-------------------------|---------------------------------------|
| NOM. SIZE | Approx. Net WT./LBS. | DIM. A INCHES |
| 3/4 x 1/2 | .121 | 1/4 |
| 1 x 1/2 | .139 | ⁷ /16 |
| 1 x 3/4 | .184 | ¹³ / ₃₂ |
| 1 1/4 x 3/4 | .245 | 1/2 |
| 1 1/4 x 1 | .231 | ⁷ /16 |
| 1 1/2 x 3/4 | .382 | ¹⁵ /32 |
| 1 1/2 x 1 | .370 | ¹³ / ₃₂ |
| 1 1/2 x 1 1/4 | .399 | ⁹ / ₃₂ |
| 2 x 3/4 | .516 | ²⁹ / ₃₂ |
| 2 x 1 | .552 | ¹¹ /16 |
| 2 x 1 1/4 | .570 | ¹¹ /16 |
| 2 x 1 1/2 | .662 | ⁷ /16 |
| 2 1/2 x 1 | .620 | ³¹ / ₃₂ |
| 2 1/2 x 1 1/4 | .644 | 1 |
| 2 1/2 x 1 1/2 | .678 | ²³ / ₃₂ |
| 2 1/2 x 2 | .699 | 11/32 |
| 3 x 1 1/2 | .956 | 1 ¹ / ₁₆ |
| 3 x 2 | 1.032 | ²³ / ₃₂ |
| 3 x 2 1/2 | .951 | 1/2 |
| 4 x 2 | 1.949 | 15/32 |
| 4 x 2 1/2 | 1.807 | 1 |
| 4 x 3 | 1.960 | 27/32 |
| | \sim | \sim |





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

| NOM. SIZE | Approx. Net WT./LBS. | DIM. B INCHES |
|-----------|-------------------------|---------------------------------|
| 1/2 | .082 | 1 ³ /4 |
| 3/4 | .157 | 2 ¹ /4 |
| 1 | .190 | 2 ¹ /4 |
| 1 1/4 | .271 | 215/32 |
| 1 1/2 | .511 | 3 ¹¹ / ₃₂ |
| 2 | .691 | 3 5/8 |
| 2 1/2 | .669 | 2 ¹⁵ /16 |
| 3 | .979 | 3 ⁵ / ₁₆ |
| 4 | 1.878 | 4 ⁵ / ₁₆ |

COUPLINGS (Cont.)

| - | в | |
|---|---|--|

PC601L Extende

| xtended | Repair | Coupling | РхР |
|---------|--------|----------|-----|

| NOM. SIZE | APPROX. NET WT./LBS. | DIM. B INCHES |
|-----------|-------------------------|---------------------------------|
| 1/2 | 0.1250 | 2 ²⁹ / ₃₂ |
| 3/4 | 0.2200 | 3 ⁹ / ₃₂ |
| 1 | 0.3050 | 3 ²¹ / ₃₂ |
| 1 1/4 | 0.4090 | 4 ¹ / ₁₆ |
| 1 1/2 | 0.7150 | 4 ²¹ / ₃₂ |
| 2 | 1.0230 | 5 ¹ /4 |

| PC636 | | A |
|--------------|-------------------------|------------------|
| Crossover Co | oupling P x F | P – Wrot |
| NOM. SIZE | APPROX. NET WT./LBS. | DIM. A INCHES |
| 1/2 | .222 | 25/32 |
| | | |

ELBOWS



PC606 45° Elbow P x P – Wrot

| NOM. SIZE | APPROX. NET WT./LBS. | DIM. C INCHES | DIM. D INCHES |
|-----------|-------------------------|-------------------------------|-------------------------------|
| 1/2 | .092 | ³ /8 | ³ /8 |
| 3/4 | .181 | ¹ /2 | 1/2 |
| 1 | .251 | ⁵ /8 | ⁵ /8 |
| 1 1/4 | .403 | ²⁵ / ₃₂ | ²⁵ / ₃₂ |
| 1 1/2 | .666 | ¹⁵ /16 | ¹⁵ /16 |
| 2 | 1.063 | 1 ³ /16 | 1 ³ /16 |
| 2 1/2 | 1.041 | ²⁹ /32 | ²⁹ /32 |
| 3 | 1.536 | 1 ¹ /8 | 1 ¹ /8 |
| 4 | 3.375 | 1 ¹¹ /16 | 1 ¹¹ /16 |

ELBOWS (Cont.)



PC606-2 45° Elbow Ftg x P – Wrot

| NOM. SIZE | APPROX. NET WT/LBS. | DIM. B INCHES | DIM. C INCHES |
|-----------|------------------------|--------------------------------|-------------------------------|
| 1/2 | .094 | 1 ⁵ /16 | ⁷ /16 |
| 3/4 | .171 | 1 ¹³ /32 | 17/32 |
| 1 | .248 | 1 ¹⁷ /32 | ⁹ /16 |
| 1 1/4 | .368 | 13/4 | ¹¹ /16 |
| 1 1/2 | .673 | 2 ⁵ /16 | ¹³ /16 |
| 2 | 1.057 | 25/8 | 1 |
| 2 1/2 | 1.050 | 2 ³ /16 | ²⁹ / ₃₂ |
| 3 | 1.526 | 2 ¹⁹ /32 | 15/32 |
| 4 | 3.284 | 3 ³ / ₃₂ | 1 ¹⁷ /32 |



PC607 90° Elbow P x P – Wrot

| APPROX. T WT./LBS. | DIM. C INCHES | DIM. D INCHES |
|-----------------------|---|---|
| .110 | ²³ /32 | ²³ /32 |
| .223 | 1 ³ /32 | 1 ³ /32 |
| .201 | 1 ¹ /32 | 15/32 |
| .331 | 1 ⁷ /16 | 17/16 |
| .321 | 1 ⁵ /16 | 17/16 |
| .528 | 1 ²⁷ /32 | 127/32 |
| .895 | 27/32 | 27/32 |
| 1.480 | 2 ¹⁵ /16 | 215/16 |
| 1.224 | 1 ⁵ /8 | 15/8 |
| 1.900 | 2 | 2 |
| 3.935 | 2 ¹⁵ /32 | 215/32 |
| | T WT/LBS. .110 .223 .201 .331 .321 .528 | $\begin{array}{c cccc} \text{TWT/LBS} & \text{INCHES} \\ \hline \text{TWT/LBS} & \text{INCHES} \\ \hline 110 & 2^3/_{32} \\ \hline 223 & 1^3/_{32} \\ \hline .201 & 1^1/_{32} \\ \hline .331 & 1^7/_{16} \\ \hline .321 & 1^5/_{16} \\ \hline .528 & 1^{27}/_{32} \\ \hline .895 & 2^{7}/_{32} \\ \hline 1.480 & 2^{15}/_{16} \\ \hline 1.224 & 1^5/_8 \\ \hline 1.900 & 2 \\ \hline \end{array}$ |



PC607-2 90° Elbow Ftg x P – Wrot

| | 0 | | |
|-----------|------------------------|---------------------------------------|---------------------------|
| NOM. SIZE | APPROX. NET WT/LBS. | DIM. B INCHES | DIM. C INCHES |
| 1/2 | .110 | 1 ²¹ /32 | ²⁷ /32 |
| 3/4 | .219 | 27/32 | 1 ¹ /16 |
| 1 | .319 | 2 ¹ / ₂ | 1 ¹³ /32 |
| 1 1/4 | .490 | 3 ³ / ₃₂ | 1 ²⁹ /32 |
| 1 1/2 | .871 | 3 ¹⁵ /16 | 27/32 |
| 2 | 1.474 | 4 ¹⁷ / ₃₂ | 2 ²⁹ /32 |
| 2 1/2 | 1.356 | 37/32 | 1 ¹⁹ /32 |
| 3 | 2.065 | 3 ¹³ /16 | 2 |
| 4 | 3.920 | 43/4 | 2 ¹⁵ /32 |



90° Long Radius Elbow P x P – Wrot

| NOM. SIZE | APPROX. NET WT/LBS. | DIM. C INCHES | DIM. D INCHES |
|-----------|------------------------|--------------------------------|--------------------------------|
| 2 1/2 | 2.066 | 311/16 | 311/16 |
| 3 | 2.810 | 4 ¹ / ₃₂ | 4 ¹ / ₃₂ |
| 4 | 5.696 | 5 ¹ /4 | 5 ¹ /4 |
| | | | |



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

| NOM. SIZE | APPROX. NET WT/LBS. | DIM. B INCHES | DIM. C INCHES |
|-----------|------------------------|--------------------|--------------------------------|
| 2 1/2 | 2.114 | 5 ⁷ /32 | 311/16 |
| 3 | 3.037 | 5 ³ /4 | 4 ¹ / ₃₂ |





PC607-3 90° Elbow P x F - Wrot

| NOM. SIZE | APPROX. NET WT/LBS. | DIM. A INCHES | DIM. C INCHES |
|-----------|------------------------|---------------------------------------|---------------------------------|
| 1/2 | .191 | 2 ¹ / ₂ | ²⁵ /32 |
| 1/2 x 3/8 | .148 | 27/32 | ²⁵ /32 |
| 1/2 x 3/4 | .243 | 2 ¹¹ /16 | ²⁵ /32 |
| 3/4 | .361 | 3 ³ / ₃₂ | 11/16 |
| 3/4 x 1/2 | .321 | 2 ¹³ /16 | 11/16 |
| 1 | .513 | 3 ¹⁵ / ₃₂ | 1 ¹³ / ₃₂ |
| 1 1/4 | .892 | 43⁄16 | 1 ²⁷ / ₃₂ |
| 1 1/2 | 1.314 | 51/16 | 27/32 |
| 2 | 2.109 | 55/8 | 229/32 |



PC607-4 90° Elbow P x M - Wrot

| NOM. SIZE | APPROX. NET WT/LBS. | DIM. B INCHES | DIM. C INCHES |
|-----------|------------------------|---------------------------------|---------------------------------------|
| 1/2 | .183 | 29/32 | 25/ ₃₂ |
| 1/2 x 3/4 | .245 | 221/32 | 25/ ₃₂ |
| 3/4 | .373 | 3 | 1 ¹ /16 |
| 3/4 x 1/2 | .340 | 3 ¹ /16 | 1 ¹ / ₁₆ |
| 1 | .521 | 33/8 | 17⁄16 |
| 1 1/4 | .926 | 4 ¹ / ₃₂ | 1 ²⁷ / ₃₂ |
| 1 1/2 | 1.433 | 4 ²⁹ / ₃₂ | 27/32 |
| 2 | 2.205 | 55/8 | 2 ²⁹ /32 |



| PC607E-2 Extended | Elbow P x | FTG – | Wrot |
|----------------------|------------------------|------------------|-------------------|
| NOM. SIZE | APPROX. NET WT/LBS. | DIM. B INCHES | DIM. C INCHES |
| 3/4 | .407 | 61/8 | ²⁹ /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 | ⁹ /16 |
| 3/4 | .010 | ³ /4 | 3/4 | ¹¹ /16 |



PC605 Stiffonor –

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. | | ONS E | |
|-----------|----------------------------|-------------------|-------------------|-------------------|
| 1/2 | .252 | ¹⁷ /32 | 7/8 | ²⁷ /32 |
| 3/4 | .588 | ²³ /32 | 1 ⁵ /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 | ²⁷ /32 |

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FLANGES



PC741 A Companion Flange P x Flange - Cast Bronze Flange/ Wrot Outlet

| NOM. SIZE | APPROX. NET WT. LBS. | D B | IMENSI INCHE | | W |
|-----------|----------------------------|----------------------------|--------------------------------------|------------------|--------------------------------------|
| 1 | 1.428 | 1 ¹ /4 | 4 ¹ / ₄ | 1/4 | 3 ¹ /8 |
| 1 1/4 | 1.632 | 1 ⁵ /16 | 45/8 | 1/4 | 3 ¹ / ₂ |
| 1 1/2 | 2.186 | 1 ⁷ /16 | 5 | ⁵ /16 | 37/8 |
| 2 | 3.352 | 1 ¹¹ /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. | DIN A | S C | |
|-----------|-------------------------------|--------------------------------------|---------------------------------|-------------------------------|
| 3/4 | 1.518 | 1 ²¹ / ₃₂ | 2 ¹⁷ / ₃₂ | ⁷ / ₁₆ |
| 1 | 2.013 | 1 ²³ / ₃₂ | 2 ¹⁹ / ₃₂ | 1/2 |
| 1 1/4 | 2.623 | 1 ²¹ / ₃₂ | $2^{21}/_{32}$ | ⁹ / ₁₆ |
| 1 1/2 | 3.342 | $1^{1}/_{2}$ | 2 ⁷ /8 | ⁵ /8 |
| 2 | 4.884 | 1 ¹⁵ / ₃₂ | 2 ¹¹ / ₃₂ | 5/8 |
| 2 1/2 | 6.418 | 3/4 | 2 ²⁵ / ₃₂ | ⁵ /8 |
| 3 | 7.409 | ¹⁵ / ₃₂ | 2 ¹⁵ / ₁₆ | ²¹ / ₃₂ |
| 4 | 10.920 | ²¹ / ₃₂ | 3 ³ /8 | ²³ / ₃₂ |
| NOM. SIZE | D | IMENSION F | IS INCHES | |
| 3/4 | ⁹ / ₁₆ | 2 ³ /4 | 3 ⁷ /8 | ⁵ /8 |
| 1 | ⁵ /8 | 3 ¹ /8 | 4 ¹ / ₄ | ⁵ /8 |
| 1 1/4 | ¹¹ / ₁₆ | 3 ¹ / ₂ | 4 ⁵ /8 | ⁵ /8 |
| 1 1/2 | ²⁵ / ₃₂ | 3 ⁷ /8 | 5 | ⁵ /8 |
| 2 | ²⁵ / ₃₂ | 4 ³ /4 | 6 | 3/4 |
| 2 1/2 | 3/4 | 5 ¹ / ₂ | 7 | 3/4 |
| 3 | ¹³ / ₁₆ | 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 $\leq 0.25\%$

NIBCO INC. WORLD HEADQUARTERS • 1516 MIDDLEBURY ST. • ELKHART, IN 46516-4740 • USA • PH: 1.800.234.0227 TECH SERVICES PH: 1.888.446.4226 • FAX: 1.888.336.4226 • INTERNATIONAL OFFICE PH: +1.574.295.3327 • FAX: +1.574.295.3455

1

.740

6¹/16

FLANGES (Cont.)



PC672-2 A Companion Flange FTG x Flange – Wrot

| NOM. SIZE | APPROX. NET WT. LBS. | D A | IMENSION INCHES C | NS D |
|-----------|----------------------------|--------|-------------------------|-------------------|
| 2 | 5.46 | 6 | ⁵ /8 | ²⁵ /32 |
| 2 1/2 | 7.44 | 6 | ⁵ /8 | ²⁵ /32 |
| 3 | 8.63 | 6 | ⁵ /8 | ²⁵ /32 |
| 4 | 12.03 | 6 | ²³ /32 | ⁷ /8 |

| NOM. SIZE | D | IMENSION INCHES F | IS G |
|-----------|-------------------|-------------------------|-----------------|
| 2 | 4 ³ /4 | 6 | 3/4 |
| 2 1/2 | 5 ¹ /2 | 7 | ³ /4 |
| 3 | 6 | 7 ¹ /2 | ³ /4 |
| 4 | 7 ¹ /2 | 9 | 3/4 |

TEES



PC611 Tee P x P x P – Wrot

| | APPROX. DIMENSIONS NET WT. INCHES | | | |
|-----------------|--------------------------------------|--------------------|---------------------------|--------------------|
| NOM. SIZE | LBS. | С | F | G |
| 1/2 | .176 | ²³ /32 | ²³ /32 | ¹⁵ /32 |
| 1/2 x 1/2 x 3/4 | .314 | 2 ¹ /16 | 2 ¹ /16 | ¹⁵ /16 |
| 1/2 x 1/2 x 1 | .491 | 17/32 | 17/32 | 7/8 |
| 3/4 | .320 | ²⁵ /32 | ²⁵ /32 | ²¹ /32 |
| 3/4 x 1/2 x 1/2 | .281 | ⁵ /8 | ²⁹ /32 | ²¹ /32 |
| 3/4 x 1/2 x 3/4 | .320 | ²¹ /32 | 1 ¹ /16 | ¹¹ /16 |
| 3/4 x 3/4 x 1/2 | .276 | ²¹ /32 | ²¹ /32 | ²¹ /32 |
| 3/4 x 3/4 x 1 | .461 | 1 ¹ /32 | 1 ¹ /32 | ²⁹ /32 |
| 1 | .501 | ⁷ /8 | ⁷ /8 | ²⁹ /32 |
| 1 x 1/2 x 3/4 | .400 | ²³ /32 | 1 ¹ /4 | ²⁷ /32 |
| 1 x 1/2 x 1 | .513 | ¹³ /16 | 1 ⁵ /32 | ²⁷ /32 |
| 1 x 3/4 x 1/2 | .440 | ¹³ /16 | 1 ¹ /16 | 1 ⁵ /32 |
| 1 x 3/4 x 3/4 | .459 | ²⁵ /32 | ³¹ /32 | ¹³ /16 |

TEES (Cont.)

| NE | PROX. T WT. .BS. | DIN C | леnsio Inches F | NS G |
|---|------------------------|-------------------|---------------------------|--|
| 1 x 3/4 x 1 | .578 | ¹³ /16 | 1 ¹ /16 | ⁷ /8 |
| 1 x 1 x 1/2 | .324 | ²¹ /32 | ²¹ /32 | 7/8 |
| 1 x 1 x 3/4 | .388 | ³ /4 | ³ /4 | 27/32 |
| 1 x 1 x 1 1/4 | .723 | 1 ¹ /8 | 1 ¹ /8 | 7/8 |
| 1 1/4 | .759 | 1 | 1 | ¹⁵ /16 |
| 1 1/4 x 1/2 x 11/4 | .690 | ³¹ /32 | 117/32 | ³¹ / ₃₂ |
| 1 1/4 x 1 x 1/2 | .674 | ³¹ /32 | 1 ⁵ /32 | 1 ⁵ /8 |
| 1 1/4 x 3/4 x 1/2 | .682 | ¹⁵ /16 | 1 ⁹ /32 | 15/8 |
| 1 1/4 x 3/4 x 3/4 | .565 | ³ /4 | 17/32 | 1 ¹ /32 |
| 1 1/4 x 3/4 x 1 | .709 | ³¹ /32 | 1 ¹ /4 | 1 ⁵ /16 |
| 1 1/4 x 3/4 x 1 1/4 | .698 | ³¹ /32 | 1 ⁹ /32 | ¹⁵ /16 |
| 1 1/4 x 1 x 3/4 | .753 | ²⁷ /32 | 1 ³ /16 | 1 ¹³ /32 |
| 1 1/4 x 1 x 1 | .725 | ³¹ /32 | 1 ⁷ /32 | 1 ⁹ /32 |
| 1 1/4 x 1 1/4 x 1/2 | .408 | 1 | 1 | 1 ¹⁷ /32 |
| 1 1/4 x 1 1/4 x 3/4 | .589 | ²³ /32 | ²³ /32 | ¹⁵ /16 |
| 1 1/4 x 1 1/4 x 1 | .508 | 7/8 | ⁷ /8 | ³¹ /32 |
| 1 1/2 | 1.179 | ¹⁵ /16 | ¹⁵ /16 | 1 ³ /32 |
| 1 1/2 x 1/2 x 1 1/2 | 1.263 | ²⁹ /32 | 1 ²⁹ /32 | 1 |
| 1 1/2 x 3/4 x 3/4 | 1.101 | ²⁹ /32 | 1 ¹³ /16 | |
| 1 1/2 x 1 x 3/4 | 1.217 | ¹⁵ /16 | 1 ³ /4 | 1 ¹³ /16 |
| 1 1/2 x 1 x 1 | 1.105 | ¹³ /16 | | 119/32 |
| <u>1 1/2 x 1 x 1 1/2</u> | 1.146 | 27/32 | 121/32 | 1 ¹ /8 |
| 1 1/2 x 1 1/4 x 3/4 | 1.164 | ³¹ /32 | 15/8 | 17/8 |
| 1 1/2 x 1 1/4 x 1 | 1.105 | 7/8 | 119/32 | |
| <u>1 1/2 x 1 1/4 x 1 1/4</u> | | 15/16 | | |
| <u>1 1/2 x 1 1/2 x 1/2</u> | | 3/8 | 3/8 | 1 ¹ /8 |
| <u>1 1/2 x 1 1/2 x 3/4</u> | | 19/32 | 19/32 | 1 ³ /32 |
| <u>1 1/2 x 1 1/2 x 1</u> | | 11/16 | 11/16 | 1 ³ /16 |
| <u>1 1/2 x 1 1/2 x 1 1/2</u> | | | 7/8 | 1 ¹⁹ /32 |
| 2 | 1.771 | | 1 ¹³ /32 | |
| 2 x 1/2 x 2 | 1.663 | | | |
| 2 x 1 x 1 2 x 1 x 2 | 1.764 1.564 | | | 2 ⁷ /32 |
| | 1.364 | | | 1 ¹³ / ₃₂ 2 ¹ / ₈ |
| $\frac{2 \times 1 1/4 \times 1 1/4}{2 \times 1 1/2 \times 2/4}$ | 1.542 | | | |
| <u>2 x 1 1/2 x 3/4</u> 2 x 1 1/2 x 1 | | | 1 ²⁹ /32 | |
| $\frac{2 \times 1 1/2 \times 1}{2 \times 1 1/2 \times 1 1/4}$ | 1.546 | | 1 ²⁹ /32 | |
| 2 x 1 1/2 x 1 1/4 2 x 1 1/2 x 1 1/2 | <u>1.543</u> 1.670 | | | 1 ¹³ /32 |
| 2 x 1 1/2 x 1 1/2 | 1.787 | | 1 ¹¹ /16 | |
| 2 x 2 x 1/2 | 1.576 | | 1 ³ /8 | |
| 2 x 2 x 1/2 2 x 2 x 3/4 | 1.256 | ³ /4 | ³ /4 | |
| 2 x 2 x 1 | 1.530 | | | 1 ¹¹ /16 |
| 2 x 2 x 1 1/4 | 1.576 | | 1 ³ /8 | |
| 2 x 2 x 1 1/2 | 1.770 | | 1 ¹ /8 | |
| 2 1/2 | 2.082 | | | |
| 2 1/2 x 3/4 x 2 1/2 | 2.294 | | | 1 ¹³ /16 |
| 2 1/2 x 1 x 2 1/2 | 2.004 | | | 1 ²⁵ /32 |
| 2 1/2 x 1 1/4 x 2 1/2 | | | | |
| 2 1/2 x 1 1/2 x 2 1/2 | | | | 17/8 |
| 2 1/2 x 1 1/2 x 2 | 3.052 | | | 2 ³ /8 |
| | | , | 7.5 | , - |

| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | ٨pp | RUX DI | MENSIONS |
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| $\begin{array}{c} 2\ 1/2\ x\ 2\ x\ 1\ 1/4 & 2.954\ 1^{11}{16}\ 2\ 2^{19}{32} & 2\ 2^{15}{32} \\ 2\ 1/2\ x\ 2\ x\ 1\ 1/2 & 2.976\ 1^{23}{32}\ 2\ 2\ 2^{15}{32} \\ 2\ 1/2\ x\ 2\ x\ 2\ 1/2 & 2.3\ 0.46\ 1^{13}{16}\ 1^{31}{32}\ 2^{1/4} \\ 2\ 1/2\ x\ 2\ x\ 2\ 1/2 & 2.150\ 1^{13}{16}\ 1^{31}{32}\ 2^{1/4} \\ 2\ 1/2\ x\ 2\ x\ 2\ 1/2 & 1/2 & 2.150\ 1^{13}{16}\ 1^{31}{32}\ 2^{1/4} \\ 2\ 1/2\ x\ 2\ 1/2\ x\ 1/2 & 2.117\ 1^{21}{32}\ 2^{12}{12}\ 3\ 3^{1/4} \\ 2\ 1/2\ x\ 2\ 1/2\ x\ 1/2 & 2.117\ 1^{21}{32}\ 2^{12}{12}\ 3\ 3^{1/4} \\ 2\ 1/2\ x\ 2\ 1/2\ x\ 1/2 & 2.117\ 1^{21}{32}\ 2^{12}{12}\ 3\ 3^{1/4} \\ 2\ 1/2\ x\ 2\ 1/2\ x\ 1\ 2\ .010\ 1^{11}{16}\ 1^{31}{16}\ 2^{13}{14} \\ 2\ 1/2\ x\ 2\ 1/2\ x\ 1\ 1/4\ 2\ .075\ 1^{21}{32}\ 2^{12}{12}\ 2\ 2^{1/2} \\ 2\ 1/2\ x\ 2\ 1/2\ x\ 1\ 1/4\ 2\ .075\ 1^{21}{32}\ 2^{12}{12}\ 2\ 2^{1/2} \\ 2\ 1/2\ x\ 2\ 1/2\ x\ 1\ 1/4\ 2\ .075\ 1^{21}{32}\ 2^{12}{12}\ 2\ 2^{1/2} \\ 2\ 1/2\ x\ 2\ 1/2\ x\ 1\ 1/2\ 2\ .966\ 1^{27}{132}\ 2^{17}{132}\ 2^{1/4} \\ \hline 3\ x\ 3\ .3\ .043\ 1^{7}{18}\ 3^{1/2}\ 2^{3}{12}\ 2^{1/4} \\ \hline 3\ x\ 1\ 1/2\ x\ 3\ 3\ .043\ 1^{7}{18}\ 3^{1/2}\ 2^{3}{16} \\ \hline 3\ x\ 1\ 1/2\ x\ 3\ 3\ .043\ 1^{7}{18}\ 3^{1/2}\ 2^{3}{16} \\ \hline 3\ x\ 1\ 1/2\ x\ 3\ 3\ .043\ 1^{7}{18}\ 3^{1}{12}\ 2^{2}{13}\ 2^{2}{13}\ 2^{3}{14} \\ \hline 3\ x\ 2\ x\ 2\ 1/2\ 3\ .043\ 1^{7}{18}\ 3^{1}{12}\ 2^{2}{13}\ 2^{2}{13}\ 2^{3}{16} \\ \hline 3\ x\ 2\ x\ 2\ 2\ .2\ 2\ .2\ 2^{1/2}\ 3\ .2\ 2^{1/2} \\ \hline 3\ x\ 2\ x\ 2\ .2\ .2\ .2\ .2\ .2\ .2\ .2\ .2\ .2\$ | | | |
| $\begin{array}{c} 2\ 1/2\ x\ 2\ x\ 1\ 1/2 \\ 2\ 1/2\ x\ 2\ x\ 3 \\ 3\ .6\ 1^{13}/16\ 1^{31}/32\ 2^{1}/4 \\ 2\ 1/2\ x\ 2\ x\ 3 \\ 3\ .5\ 80\ 2^{17}/32\ 2^{3}/4\ 2^{3}/8 \\ 2\ 1/2\ x\ 2\ x\ 2\ 1/2\ x\ 1/2\ 2\ .1\ 50\ 1^{13}/16\ 1^{31}/32\ 1^{7}/8 \\ 2\ 1/2\ x\ 2\ x\ 2\ 1/2\ x\ 1/2\ 2\ .1\ 50\ 1^{13}/16\ 1^{31}/32\ 1^{7}/8 \\ 2\ 1/2\ x\ 2\ 1/2\ x\ 1/2\ \ 2\ .1\ 7\ 1^{21}/32\ 1^{21}/32\ 3^{1}/4 \\ 2\ 1/2\ x\ 2\ 1/2\ x\ 1/2\ \ 2\ .1\ 7\ 1^{21}/32\ 1^{21}/32\ 2^{1}/32 \\ 2\ 1/2\ x\ 2\ 1/2\ x\ 1\ 1/4\ \ 2\ .0\ 7\ 5\ 1^{21}/32\ 1^{21}/32\ 2^{1}/32 \\ 2\ 1/2\ x\ 2\ 1/2\ x\ 1\ 1/4\ \ 2\ .0\ 7\ 5\ 1^{21}/32\ 1^{21}/32\ 2^{1}/32 \\ 2\ 1/2\ x\ 2\ 1/2\ x\ 1\ 1/2\ \ 2\ .9\ 6\ 1^{27}/32\ 1^{27}/32\ 2^{1}/4 \\ 3\ \ 3\ .1\ 2\ 1/2\ x\ 2\ 1/2\ x\ 2\ .2\ .2\ .2\ .2\ .2\ .2\ .2\ .2\ .2\$ | | | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | 2 1/2 2 x 2 | 3.046 113/1 | 6 1 ³¹ /32 2 ¹ /4 |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | 2 1/2 x 2 x 3 | | 2 2 ³ /4 2 ³ /8 |
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ | 2 1/2 x 2 x 2 1/2 | 2.150 113/1 | |
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ | | | |
| $\begin{array}{c} \begin{array}{c} 2 \ 1/2 \ x \ 2 \ 1/2 \ x \ 1 \ 1/4 \ 2.075 \ 1^{21}/_{32} \ 1^{21}/_{32} \ 2^{21}/_{32} \\ 2 \ 1/2 \ x \ 2 \ 1/2 \ x \ 1 \ 1/2 \ 2.966 \ 1^{27}/_{32} \ 1^{27}/_{32} \ 2^{1}/_{4} \\ \hline 3 \ 3.122 \ 1^{15}/_{16} \ 1^{15}/_{16} \ 2^{1}/_{32} \\ \hline 3 \ x \ 3/4 \ x \ 3 \ 3.049 \ 1^{7}/_8 \ 3^{1}/_2 \ 2^{3}/_{16} \\ \hline 3 \ x \ 1 \ x \ 3 \ 3.043 \ 1^{7}/_8 \ 3^{1}/_2 \ 2^{3}/_{16} \\ \hline 3 \ x \ 1 \ x \ 3 \ 3.043 \ 1^{7}/_8 \ 3^{1}/_2 \ 2^{3}/_{16} \\ \hline 3 \ x \ 1 \ x \ 3 \ 3.043 \ 1^{7}/_8 \ 3^{1}/_2 \ 2^{1}/_{32} \ 2^{1}/_{32} \\ \hline 3 \ x \ 1 \ x \ 3 \ 3.043 \ 1^{7}/_8 \ 3^{1}/_2 \ 2^{1}/_{32} \ 2^{1}/_{32} \\ \hline 3 \ x \ 1 \ x \ 3 \ 3.043 \ 1^{7}/_8 \ 3^{1}/_2 \ 2^{1}/_{32} \ 2^{1}/_{32} \\ \hline 3 \ x \ 1 \ x \ 3 \ 3.043 \ 1^{7}/_8 \ 3^{1}/_2 \ 2^{1}/_{32} \ 2^{1}/_{32} \ 3 \ x \ 2 \ x \ 2 \ 3.829 \ 1^{3}/_{32} \ 2^{2}/_{32} \ 2^{3}/_{4} \\ \hline 3 \ x \ 2 \ x \ 2 \ 1/2 \ 3.8806 \ 2 \ 2^{2}/_{32} \ 2^{3}/_{4} \\ \hline 3 \ x \ 2 \ x \ 2 \ 1/2 \ 3.761 \ 2^{1}/_{32} \ 2^{1}/_{32} \ 2^{1}/_{32} \ 3^{2}/_{4} \ 3 \ x \ 2 \ x \ 2 \ 3.866 \ 2 \ 2^{2}/_{32} \ 2^{3}/_{4} \\ \hline 3 \ x \ 2 \ x \ 2 \ 1/2 \ 3.866 \ 2 \ 2^{2}/_{32} \ 2^{3}/_{8} \ 3 \ x \ 2 \ 1/2 \ 3.866 \ 2 \ 2^{2}/_{32} \ 2^{3}/_{8} \ 3 \ x \ 2 \ 1/2 \ 3.8806 \ 1^{7}/_{8} \ 2^{7}/_{16} \ 2^{1}/_{16} \ 3 \ x \ 3 \ x \ 1/2 \ x \ 2 \ 3.010 \ 1^{13}/_{16} \ 2^{15}/_{32} \ 2^{3}/_{16} \ 3 \ x \ 3 \ x \ 1/2 \ x \ 2 \ 3.010 \ 1^{13}/_{16} \ 2^{15}/_{32} \ 2^{3}/_{16} \ 3 \ x \ 3 \ x \ 1/2 \ x \ 3 \ 3.194 \ 1^{7}/_{8} \ 1^{7}/_{8} \ 3^{1}/_{2} \ 3 \ x \ 3 \ x \ 1/2 \ 3.056 \ 1^{7}/_{8} \ 1^{7}/_{8} \ 3^{1}/_{17} \ 3^{1}/_{16} \ 3 \ x \ 3 \ x \ 1 \ 1/2 \ 3.056 \ 1^{7}/_{8} \ 1^{7}/_{8} \ 2^{1}/_{16} \ 3 \ x \ 3 \ x \ 1 \ 1/2 \ 3.056 \ 1^{7}/_{8} \ 1^{7}/_{8} \ 2^{1}/_{16} \ 3 \ x \ 3 \ x \ 1 \ 1/2 \ 3.056 \ 1^{7}/_{8} \ 1^{7}/_{8} \ 2^{1}/_{16} \ 3 \ x \ 3 \ x \ 1 \ 1/2 \ 3.056 \ 1^{7}/_{8} \ 1^{7}/_{8} \ 2^{1}/_{16} \ 3 \ x \ 3 \ x \ 2 \ 1/2 \ 3.034 \ 1^{15}/_{16} \ 1^{15}/_{16} \ 2^{1}/_{32} \ 2^{1}/_{32} \ 2^{1}/_{32} \ 2^{1}/_{32} \ 2^{1}/_{32} \ 2^{1}/_{32} \ 2^{1}/_{32} \ 3^{1}/_{32} \ $ | | | |
| $\begin{array}{c} \hline 2 \ 1/2 \ x \ 2 \ 1/2 \ x \ 1 \ 1/2 \ 2 \ .966 \ 1^{27} \ 3^2 \ 1^{27} \ 3^2 \ 2^{1} \ 2 \ 1/2 \ x \ 2 \ 1/2 \ 1^{15} \ 16 \ 1^{15} \ 16 \ 2^{1} \ 3^{2} \ 2^{1} \ 4 \ 3 \ 3 \ .049 \ 1^{7} \ 8 \ 3^{1} \ 1^{2} \ 2^{3} \ 16 \ 3 \ x \ 1 \ x \ 3 \ 3 \ .049 \ 1^{7} \ 8 \ 3^{1} \ 1^{2} \ 2^{3} \ 1^{16} \ 3 \ x \ 1 \ x \ 3 \ 3 \ .049 \ 1^{7} \ 8 \ 3^{1} \ 1^{2} \ 2^{3} \ 1^{16} \ 3 \ x \ 1 \ x \ 3 \ 3 \ .049 \ 1^{7} \ 8 \ 3^{1} \ 1^{2} \ 2^{3} \ 1^{16} \ 3 \ x \ 1 \ 1/4 \ x \ 3 \ 2 \ .986 \ 1^{7} \ 8 \ 2^{15} \ 16 \ 2^{1} \ 1^{8} \ 3 \ x \ 1 \ 1/2 \ x \ 3 \ 3 \ .049 \ 1^{7} \ 8 \ 3^{1} \ 1^{2} \ 2^{3} \ 2^{1} \ 3 \ x \ 2 \ x \ 2 \ 3 \ .049 \ 1^{7} \ 8 \ 3^{1} \ 1^{2} \ 2^{2} \ 2^{1} \ 3^{2} \ 3^{2} \ 2^{1} \ 3^{2} \$ | | | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | 2 1/2 x 2 1/2 x 1 1/2 | 2.966 127/3 | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | 2 1/2 x 2 1/2 x 2 | | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | 3 x 3/4 x 3 | | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | 3.043 1//8 | $3^{3}/16$ $2^{3}/16$ |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | 3 x 1 1/4 x 3 | 2.986 1//8 | $2^{15}/16$ $2^{1}/8$ |
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ | <u>3 x 1 1/2 x 3</u> | 3.811 2 ¹ /32 | 2 225/32 213/32 |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | 3.829 131/3 | $\frac{2 2^{21}/32 2^{3}/4}{2^{21}/32 2^{3}/4}$ |
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ | | | |
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ | | | |
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ | | | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | <u>3 x 2 1/2 x 2 1/2</u> | | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | <u>3 X Z I/Z X 3</u> | | |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | <u>3 X 3 X 1/2</u> | Z.945 1//8 | 17/ 01/ |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | | Z.941 1//8 | 17/ 05/ |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | | | $\frac{1'/8}{17}$ $\frac{3'/16}{215}$ |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | $\frac{3 \times 3 \times 1 1/4}{2 \times 2 \times 1 1/2}$ | 2.957 1//8 | 17/8 Z ¹³ /16 |
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ | | | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | $\frac{34}{60}$ $\frac{1^{10}}{213}$ | $\frac{1^{10}/16}{2^{13}/16}$ $\frac{2^{17}/2}{2^{17}/16}$ |
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ | | | |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | | |
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ | / | | |
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ | | | |
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| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$ | | | |
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| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ | | | |
| $\begin{array}{ c c c c c c c c c c c c c c c c c c c$ | | | |
| 4 x 4 x 2 1/2 6.925 2 ³ / ₈ 2 ³ / ₈ 3 ²⁹ / ₃₂ | | | |
| | | | |
| | | | |

TEES (Cont.)



| | VVIOL | | | |
|---------------------|-------------------|-------------------------------|--------------------------------|--------------------------------|
| | APPROX. NFT WT | | 1ENSIO NCHES | |
| NOM. SIZE | NET WT. LBS. | E | F | G |
| 1/2 | .257 | 1 ³¹ /32 | ²³ /32 | ²³ /32 |
| 3/4 | .434 | 211/32 | ²⁵ /32 | ²⁵ /32 |
| 3/4 x 3/4 x 1/4 | .385 | ²³ /32 | ²³ /32 | 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 | 2 ¹ /4 | ²¹ /32 | ²¹ /32 |
| 1 x 1 x 3/4 | .516 | 227/32 | ²¹ /32 | ²¹ /32 |
| 1 1/4 x 1 1/4 x 1/2 | .494 | 213/32 | ⁵ /8 | ⁵ /8 |
| 1 1/4 x 1 1/4 x 3/4 | .679 | 25/8 | ¹¹ /16 | ¹¹ /16 |
| 1 1/2 x 1 1/2 x 1/2 | .733 | 211/16 | ³ /8 | ³ /8 |
| 1 1/2 x 1 1/2 x 3/4 | .885 | 27/8 | ¹⁹ /32 | ¹⁹ /32 |
| 2 x 2 x 1/2 | 1.699 | 327/32 | 1 ³ /8 | 1 ³ /8 |
| 2 x 2 x 3/4 | 1.370 | 3 ³ /16 | ³ /4 | ³ /4 |
| 2 1/2 x 2 1/2 x 3/4 | 1.049 | 215/32 | | ¹¹ /16 |
| 2 1/2 x 2 1/2 x 2 | 1.925 | 37/32 | 1 ⁹ / ₃₂ | 1 ⁹ / ₃₂ |
| 3 x 3 x 3/4 | 1.435 | 2 ³ /4 | ¹¹ /16 | ¹¹ /16 |
| 3 x 3 x 2 | 2.097 | 315/32 | | $^{21}/_{32}$ |
| 4 x 4 x 3/4 | 2.786 | 3 ¹ / ₄ | ¹¹ /16 | ¹¹ /16 |
| 4 x 4 x 2 | 3.675 | 4 | 1 ⁹ / ₃₂ | |

UNIONS



Union $P \times P - Wrot$

| NOM. SIZE | Approx. Net WT./LBS. | DIM. A INCHES |
|-----------|-------------------------|---------------------------------|
| 1/2 | .383 | 1 ⁵ /16 |
| 3/4 | .527 | 1 ⁹ / ₃₂ |
| 1 | .804 | 111/32 |
| 1 1/4 | 1.107 | 119/32 |
| 1 1/2 | 1.703 | 121/32 |
| 2 | 2.368 | 1 ²⁷ / ₃₂ |

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 $\leq 0.25\%$

UNIONS (Cont.)



PC633-3 \Lambda Union P x F – Wrot

| NOM. SIZE | Approx. Net WT./LBS. | DIM. A INCHES |
|-----------|-------------------------|---------------------------------|
| 1/2 | .374 | 17/16 |
| 3/4 | .527 | 1 ¹⁷ / ₃₂ |
| 1 | .841 | 15/8 |
| 1 1/4 | 1.178 | 1 ¹⁵ /16 |
| 1 1/2 | 1.610 | 1 ²⁹ / ₃₂ |
| 2 | 2.445 | 2 ⁵ /32 |



PC633-4 🛆 Union P x M – Wrot

| NOM. SIZE | APPROX. NET WT./LBS. | DIM. A INCHES |
|-----------|-------------------------|---------------------------------|
| 1/2 | .386 | 1 ¹³ /16 |
| 3/4 | .567 | 1 ²⁹ / ₃₂ |
| 1 | .842 | 25/32 |
| 1 1/4 | 1.316 | 2 ³ /8 |
| 1 1/2 | 1.756 | 2 ¹³ / ₃₂ |
| 2 | 2.789 | 2 ³ /4 |



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 1 1/4 | 0.3530 | 3/8 |

ACCESSORIES



| | • | , |
|-------|-------------|-------------|
| SIZE | PART No. | |
| 1/2 | T048352 PP | Leak Detect |
| 3/4 | T048354 PP | Leak Detect |
| 1 | T048356 PP | Leak Detect |
| 1 1/4 | T048358 PP | Leak Detect |
| 1 1/2 | 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. | |
|-------|-------------|-------------|
| 2 1/2 | 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 |
| 1 1/4 | T048376 PP | PC-FP600A-LF |
| 1 1/2 | T048378 PP | PC-FP600A-LF |
| 2 | T048380 PP | PC-FP600A-LF |



Press Installation Gauge

| | ananan saag | - |
|-----------|-------------|----------|
| 0.75 | PART | |
| SIZE | No. | |
| 1 1/2 - 2 | K700001PC | |



NBCO pressystem Valves



AHEAD OF THE FLOW®

NIBCO® Press System Illustrated Valve Index



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 $\leq 0.25\%$

AHEAD OF THE FLOW®

NIBCO[®] Press System Illustrated Valve Index



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 $\leq 0.25\%$

PART

Packing

2. Handl 3. Stem

4.

5.

6.

7.

8.

9. Body

10.

11. Ball

12.

13.

14.

Handle Nut

Handle Stop

Packing Nut Stem O-ring (2)

0-ring (2)

Seats (2)

Handle

Boss Seal O-ring (2)

Body End Piece

Press End Adapter (2)

United States Patent No. 10,234,043 &

United States Patent No. 11.131.403

NIBCO[®] 585HP Lead-Free Bronze Ball Valve

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

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

Size range: ½" - 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*

> MATERIAL LIST SPECIFICATION

ASTM B16 C36000 Brass

EPDM - Leak Detection

Qmonix[®] EPDM

Reinforced PTFE

PTFF

EPDM

Carbon Steel, GEOMET® Coated

ASTM A276 S31600 Stainless Steel

ASTM C69300 Lead-free Silicon Bronze

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

ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting

ASTM A276 S31600 or A351 CF8M Stainless Steel (11/4" -2")

ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting

ASTM B584 C46500 DZR Lead-free Brass (1/2" - 1")

ASTM B75 Alloy C12200 Wrot Copper Carbon Steel, GEOMET® Coated, Plastisol Grip



B 8 372 NSF/ANSI/CAN 61 NSF/ANSI 372





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



DIMENSIONS - WEIGHTS

| _ | | | | | | | | | | | | | | | | | |
|---|--------|-------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|
| 5 | Size A | | 1 | | В | | C | | D | | E | | F | (| G | Wei | ghts |
| | ln. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | lbs. | kg |
| | 1⁄2″ | 5.93 | 151 | 4.04 | 103 | 2.03 | 52 | 2.66 | 68 | 0.50 | 13 | 3.77 | 96 | 2.37 | 60 | 0.80 | 0.36 |
| | 3⁄4″ | 6.65 | 169 | 4.18 | 106 | 2.31 | 59 | 3.17 | 81 | 0.75 | 19 | 4.93 | 125 | 3.01 | 76 | 1.21 | 0.55 |
| | 1″ | 7.35 | 187 | 4.75 | 121 | 2.74 | 70 | 3.78 | 96 | 1.00 | 25 | 5.19 | 132 | 3.42 | 87 | 1.58 | 0.72 |
| | 1¼″ | 7.95 | 202 | 5.06 | 129 | 2.92 | 74 | 4.12 | 105 | 1.25 | 32 | 5.78 | 147 | 3.76 | 96 | 2.27 | 1.03 |
| _ | 1½″ | 10.25 | 260 | 6.75 | 171 | 3.22 | 82 | 4.64 | 118 | 1.50 | 38 | 7.01 | 178 | 4.24 | 108 | 3.55 | 1.61 |
| | 2″ | 11.03 | 280 | 7.12 | 181 | 3.68 | 93 | 5.46 | 139 | 2.00 | 51 | 7.80 | 198 | 4.78 | 121 | 6.26 | 2.84 |



*NIBCO® Press System ball valves are designed to meet MSS SP-110 with the exception of the end connection. Ball valves are down-rated from 1000 psi CWP to 250 psi CWP to match the Press System. GEOMET® is a registered trademark of NOF Metal Coatings, Inc.

QMONIX[®] is a trademark of Quadion LLC

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

Visit our website for the most current information.

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

NIBCO INC. WORLD HEADQUARTERS • 1516 MIDDLEBURY ST. • ELKHART, IN 46516-4740 • USA • PH: 1.800.234.0227 TECH SERVICES PH: 1.888.446.4226 • FAX: 1.888.336.4226 • INTERNATIONAL OFFICE PH: +1.574.295.3327 • FAX: +1.574.295.3455 www.nibco.com

NIBCO[®] 585HP Lead-Free Bronze Ball Valve

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

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

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*

> **MATERIAL LIST SPECIFICATION**

ASTM B16 C36000 Brass

EPDM - Leak Detection

Qmonix® EPDM

Reinforced PTFE

PTFE

EPDM

Carbon Steel, GEOMET® Coated

ASTM A276 S31600 Stainless Steel

ASTM A276 S31600 Stainless Steel

PART Handle Nut

Packing

2 3. Stem

4.

5.

6.

7.

8.

9. Body

10.

11. Ball Body End Piece

12.

13.

14.

Handle Stop

Packing Nut Stem O-ring (2)

0-ring (2)

Seats (2)

Handle

Boss Seal O-ring (2)

Press End Adapter (2)

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

ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting

ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting

ASTM A276 S31600 or A351 CF8M Stainless Steel

Carbon Steel, GEOMET® Coated, Plastisol Grip

ASTM B75 Alloy C12200 Wrot Copper













DIMENSIONS - WEIGHTS

| - | Size | | 4 | | В | | C | | D | | E | | F | (| G | Wei | ghts |
|---|------|-------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|
| | In. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | lbs. | kg |
| - | 1⁄2″ | 5.93 | 151 | 4.04 | 103 | 2.03 | 52 | 2.66 | 68 | 0.50 | 13 | 3.77 | 96 | 2.37 | 60 | 0.80 | 0.36 |
| | 3⁄4″ | 6.65 | 169 | 4.18 | 106 | 2.31 | 59 | 3.17 | 81 | 0.75 | 19 | 4.93 | 125 | 3.01 | 76 | 1.21 | 0.55 |
| | 1″ | 7.35 | 187 | 4.75 | 121 | 2.74 | 70 | 3.78 | 96 | 1.00 | 25 | 5.19 | 132 | 3.42 | 87 | 1.58 | 0.72 |
| | 1¼″ | 7.95 | 202 | 5.06 | 129 | 2.92 | 74 | 4.12 | 105 | 1.25 | 32 | 5.78 | 147 | 3.76 | 96 | 2.27 | 1.03 |
| | 1½″ | 10.25 | 260 | 6.75 | 171 | 3.22 | 82 | 4.64 | 118 | 1.50 | 38 | 7.01 | 178 | 4.24 | 108 | 3.55 | 1.61 |
| | 2″ | 11.03 | 280 | 7.12 | 181 | 3.68 | 93 | 5.46 | 139 | 2.00 | 51 | 7.80 | 198 | 4.78 | 121 | 6.26 | 2.84 |



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www.nibco.com

PART

Packing

Packing Nut

0-ring (2)

Seats (2)

Handle

Stem O-ring (2)

Body End Piece

Handle Options: NIB-Seal Locking Lever

Press End Adapter (2)

Extended Lever w/ Memory Stop

Boss Seal O-ring (2

2

3. Stem

4

5.

6

7

8. 9. Body

10.

11. Ball

12.

13.

14.

Handle Nut Handle Stop

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 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*

MATERIAL LIST

Carbon Steel, GEOMET[®] Coated

ASTM A276 316 Stainless Steel

ASTM B16 C36000 Brass

EPDM - Leak Detection

Qmonix[®] EPDM

Reinforced PTFE

ASTM A276 S31600 Stainless Steel

ASTM C69300 Lead-free Silicon Bronze

SPECIFICATION

PTFE

EPDM

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

ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting

ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting

ASTM B584 C46500 DZR Lead-free Brass (1/2" - 1

Carbon Steel, GEOMET[®] Coated, Plastisol Grip

ASTM B75 Alloy C12200 Wrot Copper

ASTM A276 or A351 CF8M Stainless Steel (11/4" -2")









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



DIMENSIONS - WEIGHTS

| Size | Α | | В | | C | | D | | E | | F | | G | | Weights | |
|------|------|-------|------|-------|------|------|------|-------|------|------|------|-------|------|-------|---------|-------|
| In. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | lbs. | kg |
| 1/2″ | 5.11 | 129.8 | 4.04 | 102.6 | 2.03 | 51.6 | 2.65 | 67.3 | 0.50 | 12.7 | 3.08 | 78.2 | 2.39 | 60.7 | 0.740 | 0.336 |
| 3/4" | 5.52 | 140.2 | 4.18 | 106.2 | 2.31 | 58.7 | 3.20 | 81.3 | 0.75 | 19.1 | 3.93 | 99.8 | 2.97 | 75.4 | 1.293 | 0.586 |
| 1″ | 6.30 | 160.0 | 4.75 | 120.7 | 2.74 | 69.6 | 3.80 | 96.5 | 1.00 | 25.4 | 4.27 | 108.5 | 3.38 | 85.9 | 1.761 | 0.799 |
| 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 |

NIBCC 00 585HP **Handle Markings**

*NIBCO® Press System ball valves are designed to meet MSS SP-110 with the exception of the end connection. Ball valves are down-rated from 1000 psi CWP to 250 psi CWP to match the Press System. GEOMET[®] is a registered trademark of NOF Metal Coatings, Inc.

 Ω MONIX[®] 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.

Visit our website for the most current information.

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

NIBCO INC. WORLD HEADQUARTERS • 1516 MIDDLEBURY ST. • ELKHART, IN 46516-4740 • USA • PH: 1.800.234.0227 TECH SERVICES PH: 1.888.446.4226 • FAX: 1.888.336.4226 • INTERNATIONAL OFFICE PH: +1.574.295.3327 • FAX: +1.574.295.3455 www.nibco.com

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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 • Hose Cap and Chain • Press Ends Leak Detection

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

Size range: 1/2", 3/4" Pressure rating: 250 psi non-shock cold working pressure* Body design pressure: 1,000 psi non-shock cold working pressure Maximum pressure / temperature: 225 psi at 250° F*

MATERIAL LIST

Carbon Steel, GEOMET[®] Coated

ASTM A276 316 Stainless Steel

ASTM B16 C36000 Brass

C12200 Wrought Copper

Qmonix[®] EPDM

Reinforced PTFE

HPB58-3 Brass

ASTM A276 S31600 Stainless Steel

ASTM C69300 DZR Lead-free Silicon Brass

ASTM B584 46500 DZR Lead-free Brass

ASTM A276 or A351 CF8M Stainless Steel

ASTM B371 C69300 DZR Lead-free Silicon Brass

Carbon Steel, GEOMET[®] Coated, Plastisol Grip

ASTM B584 C87500 DZR Lead-free Silicon Bronze Casting

SPECIFICATION

PTFE

EPDM

EPDM

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



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





DIMENSIONS - WEIGHTS

| Size | Size A | | | B | | <u> </u> | | D | | E | | F | | G | | ghts |
|------|--------|--------|------|--------|------|----------|------|-------|------|-------|------|--------|------|-------|-------|-------|
| In. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | lbs. | kg |
| 1/2″ | 5.93 | 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

PART

Packing

Packing Nut

Press O-ring

Body End Piece

Hose Cap Assembly

Seats (2)

Handle

Stem O-ring (2)

Press End Adapter

Crimp Evident Seal

1

2

3. Stem

4.

5.

6.

7.

8. 9.

10.

11. Ball

12 Body

13

14

15.

Handle Nut

Handle Stop

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 $\leq 0.25\%$

Visit our website for the most current information.

www.nibco.com Revised 9/21/2021

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



NIBCO INC. WORLD HEADQUARTERS • 1516 MIDDLEBURY ST. • ELKHART, IN 46516-4740 • USA • PH: 1.800.234.0227 TECH SERVICES PH: 1.888.446.4226 • FAX: 1.888.336.4226 • INTERNATIONAL OFFICE PH: +1.574.295.3327 • FAX: +1.574.295.3455

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 250°F maximum operating temperature

CONFORMS TO MSS SP-110

MATERIAL LIST

| | 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 | Brass ASTM B16 Alloy C36000 |
| | | or ASTM B283 Alloy C37700 (Chrome/Nickel Plated) |
| 5. | Seat Ring (2) | Reinforced PTFE |
| 6. | Boss seal o-ring (2) | EPDM |
| 7. | O-Ring (2) | EPDM |
| 8. | Packing | PTFE |
| 9. | Pack Gland | Brass ASTM B16 Alloy C36000 |
| 10. | Stem | Silicon Bronze ASTM B371 Alloy C69300 |
| | | or ASTM B99 Alloy C65100 |
| 11. | Handle Nut | Zinc Plated Steel |
| 12. | Thrust Washer | Reinforced PTFE |
| 13. | Handle Assembly | Zinc Plated Steel Clear Chromate Plastisol Coated |
| | | |



PC-585-70 Press x Press Female End

PC-585-70 P x P

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

| | | | | | _ | | | | | | | | | |
|------|-----|------|-----|------|-----|-------|-----|------|-----|------|-----|--------|------|--|
| SI | ZE | | 4 | E | 3 | 0 | ; | | 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 System ball valves are designed to meet MSS SP-110 with the exception of the end connection. Ball valves are down-rated from 600 psi CWP to 250 psi CWP to match the NIBCO Press System. Male and female press-to-connect ends are new technology not yet covered in the current edition of this specification.

MARNING: 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 250°F maximum operating temperature

CONFORMS TO MSS SP-110

| | MA | ATERIAL LIST |
|-----|-----------------------|--|
| | 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. | O-Ring (2) | EPDM |
| 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 |



PC-585-70-66 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 | | | | | | | | | | |
|------|-----|------|------------|------|-----|-------|-----|------|-----|------|-----|--------|------|
| SI | ZE | | 4 | E | 3 | 0 | ; | | 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 | .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 System ball valves are designed to meet MSS SP-110 with the exception of the end connection. Ball valves are down-rated from 600 psi CWP to 250 psi CWP to match the NIBCO Press System. Male and female press-to-connect ends are new technology not yet covered in the current edition of this specification.

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

Visit our website for the most current information.



PC-585-70-66 P x P

www.nibco.com

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 250°F maximum operating temperature

CONFORMS TO MSS SP-110

MATERIAL LIST

| | 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. | O-Ring | EPDM |
| 13. | Press End Adapter | Wrot Copper ASTM B75 Alloy C12200 |

Handle Options:

NIBC

- Stainless steel lever
- NIB-SEAL® •
- Locking lever
- Stainless steel locking lever ۲
- Memory stop •
- Extended lever w/ memory stop
- Round •
- Wina •
- Horizontal and vertical chain •

DIMENSIONS—WEIGHTS—QUANTITIES

| | Dimensions | | | | | | | | | | | | | |
|------|------------|------|-----|------|-----|------|-----|------|-----|------|-----|--------|------|-----------|
| S | ZE | | 4 | E | 3 | (| ; | | D | E | | Weight | | 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 System ball valves are designed to meet MSS SP-110 with the exception of the end connection. Ball valves are down-rated from 600 psi CWP to 250 psi CWP to match the NIBCO Press System. Male and female press-to-connect ends are new technology not yet covered in the current edition of this specification.

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

Visit our website for the most current information.





TPC-585-70 Thread x Press Female





20

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 250°F maximum operating temperature

CONFORMS TO MSS SP-110

| | Μ | ATERIAL LIST |
|-----|-------------------|---|
| | 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. | Ball (vented) | 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. | O-Ring | EPDM |
| 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



TPC-585-70-66 NPT x P

DIMENSIONS—WEIGHTS—QUANTITIES

| | | | Dimensions | | | | | | | | | | | |
|------|-----|------|------------|------|-----------|------|-----|------|-----|------|-----|------|------|-----------|
| S | ZE | | A | E | 3 | . (| ; | I | D | | E | We | ight | Master |
| In. | mm. | In. | mm. | In. | In. mm. I | | mm. | In. | 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 System ball valves are designed to meet MSS SP-110 with the exception of the end connection. Ball valves are down-rated from 600 psi CWP to 250 psi CWP to match the Press System. Male and female press-to-connect ends are new technology not yet covered in the current edition of this specification.

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

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 250°F maximum operating temperature

CONFORMS TO MSS SP-110

| | N | IATERIAL 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. | Сар | Die Cast Brass |
| 5. | O-Ring | EPDM |
| 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 |



PC-585-70-HC Press Female x Hose 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 | | | | | | | | | | | |
|------|--------------|------|-----|------|-----|------|-----|-----|-----|------|-----|--|
| SI | SIZE A B C D | | | | | | | | | | | |
| In. | mm. | In. | mm. | 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 System ball valves are designed to meet MSS SP-110 with the exception of the end connection. Ball valves are down-rated from 600 psi CWP to 250 psi CWP to match the NIBCO Press System. Male and female press-to-connect ends are new technology not yet covered in the current edition of this specification.



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 250°F maximum operating temperature

CONFORMS TO MSS SP-110

| | Μ | IATERIAL 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. | Сар | Die Cast Brass |
| 5. | O-Ring | EPDM |
| 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 |
| | | |



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

| | | | | | Dime | ensior | IS | | | _ | |
|------|-----|------|-----|------|------|--------|-----|-----|-----|------|------|
| S | ZE | | 4 | E | 3 | (|) | | D | We | ight |
| In. | mm. | In. | mm. | In. | mm. | In. | 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 System ball valves are designed to meet MSS SP-110 with the exception of the end connection. Ball valves are down-rated from 600 psi CWP to 250 psi CWP to match the Press System. Male and female press-toconnect 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.

Visit our website for the most current information.



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



United States Patent No. 10,234,043 &

United States Patent

No. 11.131.403

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 61/372-8 Commercial Hot 180°F

Size range: 1/2" - 3"

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

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

| Μ | AT | ERI | AL | L | S1 | |
|---|----|-----|----|---|----|--|
| | | | | | | |

| Handle Nut Stem Pack Gland | Zinc Plated Steel Silicon Bronze ASTM B371 Alloy C69300 |
|----------------------------------|--|
| otom | Silicon Bronze ASTM B371 Alloy C69300 |
| Deals Cland | , |
| | Brass ASTM B16 Alloy C36000 |
| Packing, Stem | PTFE |
| Thrust Washer | Reinforced PTFE |
| Handle Assembly | Zinc Plated Steel Clear Chromate Plastisol Coated |
| Body End | Silicon Bronze ASTM B584 Alloy C87600 |
| Seat Ring (2) | Reinforced PTFE |
| Ball (vented) | DZR Brass SAE J461 C46500 (¼"-1") |
| | Stainless Steel ASTM A276 S31600 or ASTM A351 CF8M (11/4"-3") |
| Body | Silicon Bronze ASTM B584 Alloy C87600 |
| Boss seal o-ring (2) | EPDM |
| O-Ring (2) | EPDM - Leak Detection |
| Press End Adapter (2) | Wrot Copper ASTM B75 Alloy C12200 |
| | Thrust Washer Handle Assembly Body End Seat Ring (2) Ball (vented) Body Boss seal o-ring (2) D-Ring (2) |



DIMENSIONS—WEIGHTS—OUANTITIES

| | | | | | | | GIII | <u> </u> | 2071 | | | | |
|------|-----|-------|-----|------|-----|------|------|----------|------|------|-----|-------|------|
| SI | ZE | | 4 | 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 2½" and above

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

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

| Visit our | wehsite | for the | most | current | information. |
|-----------|----------|----------|------|----------|-------------------------|
| visit oui | VVEDSILE | 101 1116 | most | CUITEIIL | <i>IIII0IIIIali0II.</i> |





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

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www.nibco.com

United States Patent

NIBCO[®] Press System Lead-Free Bronze Ball Valves

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

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

Size range: 1/2" - 3"

Pressure rating: 250* PSI non-shock cold working pressure Body design pressure: 600 PSI CWP

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

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

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

MATERIAL LICT





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

|--|

 \bigcirc

빏

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

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

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

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

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

Visit our website for the most current information.

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





PC-585-66-LF РхР



NIBCO[®] Press System Lead-Free Bronze Ball Valves

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

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

Size range: 1/2" & 3/4" Pressure rating: 250 PSI non-shock cold working pressure

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

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

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

Handle Options:

- Stainless Steel Lever •
- NIB-Seal®
- NIB-Seal[®] Locking Lever •
- Locking Lever ٠
- Stainless Steel Locking Lever •
- Memory Stop •
- Extended Lever w/ Memory Stop •
- Round
- Wing
- Horizontal and Vertical Chain



DIMENSIONS—WEIGHTS—QUANTITIES

| S | SIZE A B C | | ; | <u> </u> | | | F | | G | | Weight | | | | | | |
|-----|------------|------|-----|----------|-----|------|-----|------|-----|------|--------|------|-----|------|-----|-------|------|
| In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | Lbs. | Kg. |
| 1/2 | 15 | 3.61 | 92 | 3.76 | 96 | 1.96 | 50 | 0.50 | 13 | 5.93 | 151 | 1.53 | 39 | 0.70 | 18 | 12.70 | 0.42 |
| 3/4 | 20 | 4.32 | 110 | 4.76 | 121 | 2.28 | 58 | 0.75 | 19 | 7.28 | 185 | 1.95 | 50 | 0.96 | 24 | 1.70 | 0.77 |



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

Visit our website for the most current information.





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



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

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NSF/ANSI 6

NSF/ANSI 372

NIBCO[®] Press System Lead-Free Bronze Ball Valves

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

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

Size range: 1/2" & 3/4" Pressure rating: 250 PSI non-shock cold working pressure

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

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



Up

IAPMO/ANSI Z1157

R NSF/ANSI 61 & 372



PC-585-66-LF-HC

Press Female x Hose End



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

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

Handle Options:

- Stainless Steel Lever
- ٠ NIB-Seal®
- NIB-Seal® Locking Lever ٠
- Locking Lever
- Stainless Steel Locking Lever •
- Memory Stop •
- Extended Lever w/ Memory Stop ٠
- Round
- Wing .
- Horizontal and Vertical Chain



Handle Markings

DIMENSIONS—WEIGHTS—QUANTITIES

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



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

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

Visit our website for the most current information.

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

Pressure rating: 250 psi non-shock cold working pressure Body design pressure: 600 psi non-shock cold working pressure Maximum pressure / temperature: 200 psi at 250° F

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

| hang tag | Dezincification Resistant |
|----------|------------------------------|
| | 8-17 |





TPC-585-80-LF Thread x Press Female

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 | Silicon Bronze ASTM B283 Alloy C69300 or SAE J461 C46500 (1/2" - 1") |
| | Silicon Bronze ASTM B283 Alloy C69300 or ASTM A276, Alloy S31600 (1 1/4" - 2") |
| 10. Body | Silicon Bronze ASTM B584 Alloy C87600 |
| 11. Boss seal o-ring | EPDM |
| 12. O-Ring | EPDM |
| 13. Press End Adapter | Wrot Copper ASTM B75 Alloy C12200 |
| | |

Handle Options:

- Stainless steel lever ٠
- NIB-SEAL® .
- Locking lever ٠
- Stainless steel locking lever
- Memory stop
- Extended lever w/ memory stop
- Round .
- Wina

Horizontal and vertical chain •





TPC-585-80-LF NPT x P

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

DIMENSIONS—WEIGHTS

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

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

Visit our website for the most current information.

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

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

Pressure rating: 250 psi non-shock cold working pressure Body design pressure: 600 psi CWP Maximum pressure / temperature: 200 psi at 250° F

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

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





TPC-585-66-LF Thread x Press Female



TPC-585-66-LF NPT x P

Master

Ctn. Qty.

50

30

20

12

6

6

Kg.

0.36

0.61

0.86

1.45

2.00

2 93

DIMENSIONS—WEIGHTS NOM SIZE B C G J Δ n F F Weight In. In. In. Lbs. Kg. Lbs. Lbs. mm. In. mm. mm. In. mm. mm. In. mm. mm. Kg. 15 3.1 79 3.96 101 1.96 50 0.5 13 1.86 47 30 0.7 18 5.93 151 0.80 1.2 20 101 2.28 58 0.75 19 2.45 62 40 0.96 24 7.33 186 1.35 3.96 4.76 121 1.56 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

2

51 4.38 111 3 54 90 1 51

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

26

35

38

9.86

10.53

10.94

250

267

278

3.20

4.40

6.45

(2)

Handle Markings

C

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 $\leq 0.25\%$

Handle Options:

NIB-SEAL®

Locking lever

Memory stop

Round Wing •

•

•

•

•

. •

•

In.

1/2

3/4

1

1 - 1/432 4.99 127 6.76 172 3.1 79 1.25 32 3.3 84 2.31 59 1.01

1 - 1/240 5.9 150 6.76 172 3.32 84 1.5 38 3.84 98 2.84 72 1.39

2

50 6.61 168 6.76 172 3.56 90

Stainless Steel Lever

Stainless Steel Locking Lever

Extended lever w/ memory stop

Horizontal and vertical chain

Visit our website for the most current information.

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29

Dezincificatio

New 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

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

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



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

В

D

3) (2

LA

| | Dimensions | | | | | | | | | | | | | | | | |
|-------|------------|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|------|------|
| S | Size | Α | | В | | C | | H | | L | | LA | | LB | | | |
| In. | mm. | ln. | mm. | In. | 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 |

(15)

(17) (16)

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

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

Visit our website for the most current information.

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

NIBCO INC. WORLD HEADQUARTERS • 1516 MIDDLEBURY ST. • ELKHART, IN 46516-4740 • USA • PH: 1.800.234.0227 TECH SERVICES PH: 1.888.446.4226 • FAX: 1.888.336.4226 • INTERNATIONAL OFFICE PH: +1.574.295.3327 • FAX: +1.574.295.3455 www.nibco.com

NSF/ANSI 61 NSF/ANSI 372

Dezincification Resistant

NewLead-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

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

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



Press x Hose



DIMENSIONS—WEIGHTS

н

| | Dimensions | | | | | | | | | | | | | | | | |
|-----|------------|------|-----|------|-----|------|-----|------|----------|------|-----|------|-----|------|-----|------|------|
| S | ize | | A | | B | (| C | | <u> </u> | | L | | LA | | В | | |
| In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | Lbs. | Kg |
| 1/2 | 12.70 | 3.82 | 97 | 1.57 | 40 | 0.50 | 13 | 1.73 | 44 | 7.11 | 181 | 4.84 | 123 | 5.79 | 147 | 1.38 | 0.63 |
| 3⁄4 | 19.05 | 4.50 | 114 | 2.00 | 51 | 0.75 | 19 | 2.90 | 74 | 7.28 | 185 | 4.92 | 125 | 6.04 | 153 | 2.11 | 0.96 |

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

MARNING: 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 $\leq 0.25\%$

Carbon Steel and Stainless Steel Ball Valve options available.

See Ball Valve Catalog.

Visit our website for the most current information.

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NSF/ANSI/CAN 61-2018

Dezincification

Resistant

NIBCO[®] Press Lead-Free Three Piece Bronze Ball Valves

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

Approvals: MSS SP-110/145 • Truesdail NSF/ANSI/CAN 61-2018 Commercial Hot 180°F, NSF/ANSI 372

Size range: 1/2" - 2-1/2" Pressure rating: 250 psi non-shock cold working pressure* Maximum pressure / temperature: 225 psi at 250° F*

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

| | | MATERIAL LIST |
|-----|-----------------------|---|
| | PART | SPECIFICATION |
| 1. | Dady Nuta | Zinc Dichromate Plated Steel |
| Ι. | Body Nuts | ASTM A449 Grade 5 |
| 2. | Handle Nut | Zinc Plated Steel |
| 3. | Threaded Pack Gland | Brass ASTM B16 Alloy C36000 |
| 4. | Body | Silicon Bronze ASTM B584 Alloy C87850 |
| 5. | Body End (2) | Silicon Bronze ASTM B584 Alloy C87850 |
| 6. | Handle | Steel, Plated Plastisol Coated |
| | | DZR Brass SAE J461 C46500 (¼"-1") |
| 7. | Ball | Stainless Steel ASTM A276 S31600 or ASTM A351 CF8M (1¼"-2½") |
| 8. | Seats (2) | PTFE "Y" or RPTFE "R" Glass Reinforced |
| 9. | Dady Dalta | Zinc Dichromate Plated Steel |
| 9. | 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. | O-Ring (2) | EPDM (Leak Detection) |
| 17. | Boss Seal O-ring (2) | EPDM |





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



DIMENSIONS - WEIGHTS - QUANTITIES

| Size | Size A | | В | | C | | |) | | E | F | | Wei | Master | |
|-------|--------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|--------|-----------|
| In. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | 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 |
| 21⁄2″ | 7.071 | 180 | 5.09 | 129 | 2.631 | 67 | 4.322 | 110 | 8.06 | 205 | 3.513 | 89 | 18.79 | 8.52 | 2 |

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

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

Visit our website for the most current information.

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

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NIBC

NSF/ANSI/CAN 61-2018

Dezincification

Resistant

NIBCO[®] Press Lead-Free Three Piece Bronze Ball Valves

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

Approvals: MSS SP-110/145 • Truesdail NSF/ANSI/CAN 61-2018 Commercial Hot 180°F, NSF/ANSI 372

Size range: 1/2" - 2-1/2" Pressure rating: 250 psi non-shock cold working pressure* Maximum pressure / temperature: 225 psi at 250° F*

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

| | I | MATERIAL LIST |
|-----|-----------------------|--|
| | PART | SPECIFICATION |
| 1. | Body Nuts | Zinc Dichromate Plated Steel |
| 1. | Douy Nuts | ASTM A449 Grade 5 |
| 2. | Handle Nut | Zinc Plated Steel |
| 3. | Threaded Pack Gland | Brass ASTM B16 Alloy C36000 |
| 4. | Body | Silicon Bronze ASTM B584 Alloy C87850 |
| 5. | Body End (2) | Silicon Bronze ASTM B584 Alloy C87850 |
| 6. | Handle | Steel, Plated Plastisol Coated |
| 7. | Ball | Stainless Steel ASTM A276 Type S31600 |
| 8. | Seats (2) | PTFE "Y" or RPTFE "R" Glass Reinforced |
| 9. | Dadu Dalta | Zinc Dichromate Plated Steel |
| 9. | 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 | Stainless Steel ASTM A276 Type 316 |
| 15. | Press End Adapter (2) | Wrot Copper ASTM B75 Alloy C12200 |
| 16. | O-Ring (2) | EPDM (Leak Detection) |
| 17. | Boss Seal O-ring (2) | EPDM |





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



DIMENSIONS - WEIGHTS - QUANTITIES

| Size | Size A | | B | | | C | | D | | <u> </u> | | F | | ghts | Master |
|-------|--------|-----|-------|-----|-------|-----|-------|-----|-------|----------|-------|-----|-------|------|-----------|
| In. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | 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 |
| 21⁄2″ | 7.071 | 180 | 5.09 | 129 | 2.631 | 67 | 4.322 | 110 | 8.06 | 205 | 3.513 | 89 | 18.79 | 8.52 | 2 |

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



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

LEAD-FREE: Weighted average lead content ≤ 0.25%

Visit our website for the most current information.

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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-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.

Not intended for steam or gas usage.

MATERIAL LIST

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

Options:

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

Handle Markings

PC-FP600A-LI

NIRCO



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1/2" - 2' (Patent Pending sizes 1-1/4" - 2")

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

†Tested to the performance criteria of ASME B16.51

DIMENSIONS—WEIGHTS—QUANTITIES

NSF/ANSI 61 NSF/ANSI 372 c UPC^{OD} IAPMO/ANSI Z1157

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

IAPMO/ANSI Z1157: in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press

ends to be fully tested to IAPMO PS-117 performance requirements which includes the following additional tests:

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

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

‡ Patent Pending


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-61 & 372 • MSS SP-145 • Conforms to ASME B16.51[†]

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.

MAATEDIAL LICT

Not intended for steam or gas usage.

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





- Extended lever
- EPDM Seal for Press Ends







PC-FP-600A-LF Press x Press

2 1/2" - 4"



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

†Tested to the performance criteria of ASME B16.51

DIMENSIONS—WEIGHTS—OUANTITIES

| SL | ZE | | 4 | E | 3 | (| ; | I | נ | I | | | F | We | ight |
|--------|-----|-------|-------|------|-------|------|-------|------|------|------|-------|-------|-------|-------|-------|
| 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 |

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 $\leq 0.25\%$

Visit our website for the most current information.

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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-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







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

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

†Tested to the performance criteria of ASME B16.51

DIMENSIONS—WEIGHTS—QUANTITIES

| S | Size | | Α | | В | | C | |) | E | | Weight | |
|-----|-------|------|--------|------|-------|------|-------|------|-------|------|-------|--------|--------|
| In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | 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 |

6. Hydraulic Shock (Water Hammer) Test

10. Dynamic Torsion Test for Press Connections

9. Alternate Thermal Cycling Test

7. Vibration Test

8. Thermal Cycling Test

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

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

Approvals: IAPMO/ANSI Z1157 (IGC-157) • NSF/ANSI-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 EPDM - ASTM D2000 3. O-ring PTFE 4. Washer Stainless Steel + Nylon 5. Lock Nut Steel, Plated 6. Handle 7 Stem Brass 8. Ball Chrome Plated Brass - C46500 (1/2"-1") Forged DZR Copper Alloy - C46500 9. End Cap EPDM - ASTM D2000 10. 0-ring



Press x MIP 1/2" - 1"



Press x Male 1/2" - 1"

DIMENSIONS—WEIGHTS—QUANTITIES

NSF/ANSI 61 NSF/ANSI 372 CUPC IAPMO/ANSI Z11

PC-FP600A-LF

NIBCO

Handle Markings

| S | IZE | | Α | E | 3 | (| ; | |) | E | E | | F | We | ight |
|-----|-------|------|--------|------|--------|------|-------|------|-------|------|-------|------|-------|--------|--------|
| In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | 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: 6. Hydraulic Shock (Water Hammer) Test

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

10. Dynamic Torsion Test for Press Connections

- 4. Bending Test
- 5. Vacuum Test

Options:

•

Extended lever

Wing Handle

EPDM Seal for Press Ends

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

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

Visit our website for the most current information.

†Tested to the performance criteria of ASME B16.51

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www.nibco.com

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-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 |
| | | |



Extended lever

Wing Handle

EPDM Seal for Press Ends

| $\overline{\bigcirc}$ | on off | MSS SP-145 | PC-FP600A-LF NIBCO® AHEAD OF THE FLOW® | NSF/ANSI 61 NSF/ANSI 372 _C UPC [®] IAPMO/ANSI Z1157 | S1 |
|-----------------------|-----------|------------|--|--|----|
| 7- | | | | | / |





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



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

†Tested to the performance criteria of ASME B16.51

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

DIMENSIONS—WEIGHTS—OUANTITIES

| S | IZE | | Α | E | 3 | C | ; | I | D | | | | F | We | ight |
|-----|-------|------|--------|------|--------|------|-------|------|-------|------|-------|------|-------|--------|--------|
| In. | mm. | In. | mm. | In. | 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

7. Vibration Test

8. Thermal Cycling Test

9. Alternate Thermal Cycling Test

10. Dynamic Torsion Test for Press Connections

- ends to be fully tested to IAPMO PS-117 performance requirements which includes the following additional tests: 6. Hydraulic Shock (Water Hammer) Test
- 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

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5. Vacuum 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.

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TECH SERVICES PH: 1.888.446.4226 • FAX: 1.888.336.4226 • INTERNATIONAL OFFICE PH: +1.574.295.3327 • FAX: +1.574.295.3455



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-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. | Washer | EPDM |
| 12. | Nut | Brass |
| | | |

Options:

4. Bending Test

5. Vacuum Test

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







DIMENSIONS—WEIGHTS—QUANTITIES

| S | ZE | | Α | | В | | C | | D | | E | | F | | G | | H | We | ight |
|-----|-------|------|--------|------|--------|------|-------|------|-------|------|-------|------|--------|------|-------|------|-------|--------|--------|
| In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | 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: 6. Hydraulic Shock (Water Hammer) Test
- 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
- 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 $\leq 0.25\%$

Visit our website for the most current information.

Trested to the performance criteria of ASME B16.51

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www.nibco.com



NIBCO[®] Press System Lead-Free Brass Ball Valves

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

| Options: | |
|----------|--|
|----------|--|

- Extended lever ۰
- EPDM Seal for Press Ends
- Wing Handle

| <u>(</u> | on) | MSS SP-145 | AHEAD OF THE FLOW® | NSF/ANSI 61 NSF/ANSI 372 cUPC [®] IAPMO/ANSI Z1157 | S1 |
|----------|------|------------|--------------------|--|----|
| | | | | | |





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—QUANTITIES

| SIZE | | Α | | E | 3 | C | | I | D | E | | F | | Weight | |
|------|-------|------|--------|------|--------|------|-------|------|-------|------|-------|------|-------|--------|--------|
| In. | 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 | 0.79 | 20.00 | 1.74 | 44.20 | 3.52 | 89.50 | 0.8090 | 0.3669 |

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

- 1. Unrestrained Hydrostatic Pressure Test at 20 °C (68°F) 6. Hydraulic Shock (Water Hammer) Test
- 2. Unrestrained Hydrostatic Pressure Test at 93 °C (200°F) 3. Static Torsion Test for Press Connections
 - 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.

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4. Bending Test

5. Vacuum Test

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

Tested to the performance criteria of ASMF 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 61/372 • Conforms to ASME B16.51[†]

Size range: 1/2" - 2" Pressure rating: 250 psi non-shock cold working pressure Maximum pressure / temperature: 225 psi at 250° F

Lead-free markings: White handle and blue hang tag

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

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

Not intended for steam or gas usage.

| | | MATERIAL LIST |
|-----|---------------|---|
| | PART | SPECIFICATION |
| 1. | Body | Forged DZR Copper Alloy - C46500 |
| 2. | Seat Seal (2) | PTFE |
| 3. | 0-ring | EPDM - ASTM D2000 |
| 4. | Packing | PTFE |
| 5. | Washer | Stainless Steel ASTM 321 |
| 6. | Lock Nut | Stainless Steel 304 |
| 7. | Handle | Steel, Plated |
| 8. | Nut | Brass |
| 9. | Stem | Brass |
| 10. | Ball | Chrome Plated Brass - C46500 (1/2"-1") |
| | | Stainless Steel 316 (1¼"-2") |
| 11. | End Cap | Forged DZR Copper Alloy - C46500 (F1960 Cold Expansion) |
| 12. | 0-ring | EPDM - ASTM D2000 (Leak Detect) |
| 13. | Metal Ring | Stainless Steel (11/4"-2") ^{††} |
| | | |

Options:

- Extended lever ٠
- **EPDM Seal for Press Ends**
- Wing Handle



Handle Markings



www.nibco.com



PCPXA-FP-600A-LF Press x PEX (F1960 - Cold Expansion) 1/2" - 2" Patent Pending sizes 11/4" - 2"



PCPXA-FP-600A-LF Press x PEX (F1960 - Cold Expansion) 1/2" - 2" ††

⁺⁺Patent Pending

DIMENSIONS-WEIGHTS-OUANTITIES

| SIZE | | <u>A</u> <u>B</u> | | C | <u> </u> | | | I | E | | F | We | ight | |
|---------|--|-------------------|------|--------|----------|-------|------|-------|------|-------|------|--------|--------|--------------|
| In. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | Lbs. | Kg. |
| 1/2" | 5.15 | 130.90 | 3.62 | 92.00 | 1.20 | 30.55 | 0.39 | 10.00 | 1.30 | 32.90 | 2.79 | 70.90 | 0.3400 | 0.1542 |
| 3/4" | 5.48 | 139.20 | 3.62 | 92.00 | 1.34 | 34.00 | 0.60 | 15.30 | 1.48 | 37.70 | 3.33 | 84.70 | 0.5090 | 0.2308 |
| 1" | 6.37 | 161.70 | 4.13 | 105.00 | 2.06 | 52.20 | 0.79 | 20.00 | 1.74 | 44.20 | 3.83 | 97.20 | 0.8620 | 0.3909 |
| 1 1/4" | 7.09 | 180.00 | 4.37 | 111.00 | 2.58 | 65.5 | 0.98 | 25.00 | 2.19 | 55.50 | 4.75 | 120.70 | 1.5400 | 0.6900 |
| 1 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 |
| MO/ANSI | PMO/ANSI Z1157: in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press | | | | | | | | | | | | | f ASME B16.5 |

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
- 5. Vacuum Test

4. Bending Test

9. Alternate Thermal Cycling Test

- - 6. Hydraulic Shock (Water Hammer) Test
- 7. Vibration Test 8. 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 $\leq 0.25\%$

Visit our website for the most current information.

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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 61/372 • Conforms to ASME B16.51[†]

Size range: 1/2" - 2" Pressure rating: 250 psi non-shock cold working pressure Maximum pressure / temperature: 225 psi at 250° F

Lead-free markings: White handle and blue hang tag

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

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

Not intended for steam or gas usage.

| | | MATERIAL LIST |
|-----|---------------|--|
| | PART | SPECIFICATION |
| 1. | Body | Forged DZR Copper Alloy - C46500 |
| 2. | Seat Seal (2) | PTFE |
| 3. | O-ring | EPDM - ASTM D2000 |
| 4. | Packing | PTFE |
| 5. | Washer | Stainless Steel ASTM 321 |
| 6. | Lock Nut | Stainless Steel 304 |
| 7. | Handle | Steel, Plated |
| 8. | Nut | Brass |
| 9. | Stem | Brass |
| 10 | Ball | Chrome Plated Brass - C46500 (1/2"-1") |
| 10. | Ddll | Stainless Steel 316 (1¼"-2") |
| 11. | End Cap | Forged DZR Copper Alloy - C46500 (F1807 Crimp) |
| 12. | O-ring | EPDM - ASTM D2000 (Leak Detect) |
| 13. | Metal Ring | Stainless Steel (1¼"-2") ^{††} |

- **Options:** Extended lever
- **EPDM Seal for Press Ends**
- Wing Handle
- PCPX-FP60DA-LF NIBCO® NSF/ANSI 61 NSF/ANSI 372 CUPC® ON AHEAD OF THE FLOW® SS IAPMO/ANSI Z1157 **DFF**





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 $\leq 0.25\%$

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Dezincification Resistant



C

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

> PCPX-FP-600A-LF Press x PEX (F1807 - Crimp)

> 1/2" - 2" Patent Pending sizes 1-1/4" - 2"



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

www.nibco.com



NIBCO[®] Press System Lead-Free Brass Ball Valves

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

Options:

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



Handle Markings





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



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

DIMENSIONS—WEIGHTS—QUANTITIES

| S | SIZE A | | Α | В | | C | | D | | E | | F | | Weight | |
|-----|--------|------|--------|------|--------|------|-------|------|-------|------|-------|------|--------|--------|--------|
| In. | mm. | In. | mm. | In. | mm. | ln. | mm. | In. | mm. | In. | mm. | In. | mm. | Lbs. | Kg. |
| 1/2 | 12.7 | 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) 6. Hydraulic Shock (Water Hammer) Test

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

7. Vibration Test 8. Thermal Cycling Test 3. Static Torsion Test for Press Connections

- 4. Bending Test
- 5. Vacuum 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 $\leq 0.25\%$

Visit our website for the most current information.

†Tested to the performance criteria of ASME B16.51

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www.nibco.com

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

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

Size range: 1/2" - 1"

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

Lead-free markings: White handle and blue hang tag

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

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

Not intended for steam or gas usage.

MATERIAL LIST

| | PART | SPECIFICATION |
|-----|---------------|----------------------------------|
| 1. | Body | Forged DZR Copper Alloy - C46500 |
| 2. | Seat Seal (2) | PTFE |
| 3. | 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 | 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) |
| | | |

Options:

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

| r. | |
|------|--------------------------------------|
| ON 🔪 | 우 PCMU-FP600A-LF 당 NIBCO ® |
| | AHEAD OF THE FLOW® |







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



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

DIMENSIONS—WEIGHTS—QUANTITIES

IAPMO/ANSI Z1157

7. Vibration Test

8. Thermal Cycling Test

| SI | SIZE | | Α | | В | | C | | D | | | F | | Weight | |
|-------------|---|------|--------|------|--------|------|-------|------|-------|------|-------|------|--------|--------|--------|
| In. | mm. | In. | 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" | MIP | 6.80 | 172.70 | 3.98 | 101.00 | 2.11 | 53.50 | 0.59 | 15.00 | 3.51 | 89.20 | 4.42 | 0.9800 | 0.4500 | |
| | PM0/ANSI 71157: in addition to meeting ICG-157 test requirements the IAPM0/ANSI 71157 also requires Press | | | | | | | | | | | | | | |

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

4. Bending Test

5. Vacuum Test

6. Hydraulic Shock (Water Hammer) Test

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

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 $\leq 0.25\%$

10. Dynamic Torsion Test for Press Connections

9. Alternate Thermal Cycling Test

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



Press x Solder Union 1/2" - 1"



PCSU-FP-600A-LF Press x Solder Union 1/2" - 1"

†Tested to the performance criteria of ASME B16.51

DIMENSIONS—WEIGHTS—QUANTITIES

PC-FP600A-LF

Handle Markings

NIBCO®

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NSS

| S | SIZE A | | В | | C | | | D | E | E | | F | Weight | | |
|-----|--------|------|--------|------|--------|------|-------|------|-------|------|-------|------|--------|--------|--------|
| In. | mm. | In. | mm. | In. | mm. | In. | 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) 6. Hydraulic Shock (Water Hammer) Test

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

EPDM Seal for Press Ends

•

- 7. Vibration Test 8. Thermal Cvcling Test
 - 9. Alternate Thermal Cycling Test
 - 10. Dynamic Torsion Test for Press Connections

MARNING: 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 $\leq 0.25\%$

Visit our website for the most current information.

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TECH SERVICES PH: 1.888.446.4226 • FAX: 1.888.336.4226 • INTERNATIONAL OFFICE PH: +1.574.295.3327 • FAX: +1.574.295.3455

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

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

Size range: 1/2" - 1"

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

Lead-free markings: White handle and blue hang tag

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

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

Not intended for steam or gas usage.

| PARTSPECIFICATION1. BodyForged DZR Copper Alloy - C465002. Seat Seal (2)PTFE3. O-ringEPDM - ASTM D20004. PackingPTFE5. WasherStainless Steel ASTM 3216. Lock NutStainless Steel 3047. HandleSteel, Plated8. NutBrass9. StemBrass | |
|---|--|
| 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 | |
| 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 | |
| 4. Packing PTFE 5. Washer Stainless Steel ASTM 321 6. Lock Nut Stainless Steel 304 7. Handle Steel, Plated 8. Nut Brass | |
| 5. WasherStainless Steel ASTM 3216. Lock NutStainless Steel 3047. HandleSteel, Plated8. NutBrass | |
| 6. Lock Nut Stainless Steel 304 7. Handle Steel, Plated 8. Nut Brass | |
| 7. Handle Steel, Plated 8. Nut Brass | |
| 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. O-ring (2) EPDM - ASTM D2000 (Leak Detect) | |

Options:

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



Handle Markings

DIMENSIONS—WEIGHTS—QUANTITIES

| S | ZE | | Α | E | 3 | (| ; | | D | E | E | | F | | ight |
|-----------|--|------|--------|------|--------|------|-------|------|-------|------|-------|------|--------|------|----------------|
| In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | Lbs. | Kg. |
| 1/2" | 12.70 | 6.82 | 173.20 | 3.78 | 96.00 | 1.83 | 46.50 | 0.59 | 15.00 | 2.78 | 70.70 | 4.36 | 110.70 | 0.77 | 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 |
| APMO/ANSI | PMO/ANSI Z1157: in addition to meeting ICG-157 test requirements, the IAPMO/ANSI Z1157 also requires Press TTested to the performance criteria of ASME B | | | | | | | | | | | | | | of ASME B16.51 |

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:

4. Bending Test

5. Vacuum Test

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

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

6. Hydraulic Shock (Water Hammer) Test

Visit our website for the most current information.

VECTOR NOT THE PROVINCE OF THE

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



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

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7. Vibration Test

8. Thermal Cycling Test

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



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

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

Size range: 1/2" - 1" Pressure rating: 250 psi non-shock cold working pressure Maximum pressure / temperature: 225 psi at 250° F

Lead-free markings: White handle and blue hang tag

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

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

Not intended for steam or gas usage.

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

Options:

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

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Handle Markings

DIMENSIONS—WEIGHTS—QUANTITIES

S1

| SIZE | | Α | E | 3 | C | ; | I | D | E | | | F | We | ight |
|------|-------|-------|------|-----|------|------|------|-------|------|------|------|-------|------|------|
| In. | In. | mm. | In. | mm. | In. | mm. | In. | 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:

nds to be fully tested to IAPMU PS-117 performance requirements which includes the following additional tests: 1. Unrestrained Hydrostatic Pressure Test at 20 °C (68°F) 6. Hydraulic Shock (Water Hammer) Test

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

00°F) 7. Vibration Test

8. Thermal Cycling Test

3. Static Torsion Test for Press Connections 4. Bending Test 5. Vacuum Test

9. Alternate Thermal Cycling Test 10. Dynamic Torsion Test for Press Connections

MARNING: 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 $\leq 0.25\%$

Visit our website for the most current information.

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www.nibco.com

47

Tested to the performance criteria of ASME B16.51

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

Dezincification

Resistant

NSF/ANSI 61 & 372 IAPMO/ANSI 21157

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



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 61/372 • Conforms to ASME B16.51[†]

Size range: 1/2" - 1½" Pressure rating: 250 psi non-shock cold working pressure Maximum pressure / temperature: 150 psi at 250° F

Lead-free markings: White handle and blue hang tag

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

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

Not intended for steam or gas usage.

| | | MATERIAL LIST |
|-----|----------------|--------------------------------------|
| | PART | SPECIFICATION |
| 1. | Body | Forged DZR Copper Alloy - C46500 |
| 2. | Seat Seal (2) | PTFE |
| 3. | O-ring | EPDM - ASTM D2000 |
| 4. | Packing | PTFE |
| 5. | Washer | Stainless Steel ASTM 321 |
| 6. | Lock Nut | Stainless Steel 304 |
| 7. | Handle | Steel, Plated |
| 8. | Nut | Brass |
| 9. | Stem | Brass |
| 10. | Ball | Chrome Plated Brass - C46500 (½"-1") |
| | | Stainless Steel 316 (1¼"-1½") |
| 11. | End Cap | Forged DZR Copper Alloy - C46500 |
| 12. | Check Valve | OV25-HT Cartridge |
| 13. | O-ring (2) | EPDM - ASTM D2000 (Leak Detect) |
| 14. | Metal Ring (2) | Stainless Steel (1¼"-1½") |



I wanted the will



| - | PC-FP-485-LF | |
|--|---|--|
| _ | Press x Press | |
| _ | 1/2" - 1½" (Patent US 10,240,698: sizes 1¼"-1½") | |
| _ | A | |
| - [| A | |
| | B (5) (6) (| 7 8 |
| - <u> </u> | | (9) |
| _ | | |
| | (1) (2) (3) | |
| - Ĭ | | |
| | | |
| _ [_] FLOW | | FLOW |
| _ `` | | and the second sec |
| _ | (13) E | |
| NSF/ANSI 61 NSF/ANSI 372 S1 | F | |
| IAPMO/ANSI 3/2 IAPMO/ANSI 21157 Patent US 10,240,698 | PC-FP- | 485-LF |
| | Press x 1/2" - | |
| | 1/2 - | 1/2 |

DIMENSIONS—WEIGHTS—QUANTITIES

PC-FP485-LF

Handle Markings

AHEAD OF THE FLOW

| | | | | | | | | | U UAI | | , | | | |
|-----------|--------------|-------------------------------------|----------------|------------|-----------------------------|--------------|--------------|------------|--|----------------|------------|------------------|-------------------|--------------------------------|
| SIZE | SIZE A | | | В | (|) | | כ | | E | | F | We | ight |
| In. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | 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 |
| | | ition to meeting 'MO PS-117 perf | | | | | | S | | | †Teste | d to the perform | | f ASME B16.51 US 10,240,698 |
| Unrestrai | ned Hydrosta | tic Pressure To | est at 20 °C (| 68°F) | 4. Bending T | est | | | 7. Vibration Test 9. Alternate The | | | ermal Cycling | rmal Cycling Test | |
| | | tic Pressure To Press Connect | | - | 5. Vacuum T 6. Hydraulic | | er Hammer) 1 | est | 8. Thermal Cycling Test 10. Dynamic Torsion Test for Press Connections | | | | | Press Connections |
| | | is product ca mation go to | | | | ding lead, v | which is kn | own to the | e State of Ca | alifornia to c | ause cance | r and birth defe | cts or other r | eproductive harm. |
| 'isit our | website | for the mo | ost curre | ent inform | nation. | | | | | | | LEAD-FREE: V | Veighted aver | age lead content \leq 0. |

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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

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) | Bronze ASTM B 61 Alloy C92200 | | | | | | | | |
| 12. | O-Ring (2) | EPDM | | | | | | | | |

| Size | | | Α | E | 3 | | C | Weight | | |
|-------|-----|------|-----|-------|-----|------|-----|--------|------|--|
| In. | mm. | In. | mm. | In. | mm. | In. | 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 | |
| | | | | | | | | | | |

† No packing gland, packing only in this size.

NIBCO Press System gate valves are designed to meet MSS SP-80 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.



Dezincification

Resistant

PF-111 Press x Press





NSF/ANSI 61 NSF/ANSI 372

Dezincification Resistant

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[†] psi non-shock cold working pressure Maximum pressure / temperature: 180 psi at 200° F

Lead-Free markings:

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

NSF/ANSI-61-8 Commercial Hot 180°F (includes Annex F and G) • NSF/ANSI-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. | Leak Detect O-Ring (2) | EPDM | | | | | | | | |





PC-111-LF Press x Press Female End

DIMENSIONS—WEIGHTS—QUANTITIES

| SIZ | ZE | | A | | <u>B</u> | | C | | <u> </u> | | Ε | | F | | G | | Н | We | ight | Master |
|-------|-----|------|-------|-------|----------|------|-------|-------|----------|-------|-----|------|-----|------|-------|------|-------|------|------|----------|
| In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | 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 |

† 200 psi for 2 1/2" and 3"

‡ No packing gland, packing only in this size.

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

Visit our website for the most current information.

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

NIBC

www.nibco.com Revised 7/25/2018

Dezincification

Resistant

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

| | 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) | Bronze ASTM B 61 Alloy C92200 | | | | | | | | | |
| 13. | O-Ring (2) | EPDM | | | | | | | | | |

WEIGHTC

| Siz | Size | | Α | | В | | C | We | ight | | | |
|------------------|------|------|-----|------|-----|------|-----|------|------|--|--|--|
| In. | mm. | In. | mm. | In. | mm. | In. | 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 | | | |

109 † No packing gland, packing only in this size.

2

50 4 28

DIRACNICIONIC

NIBCO Press System gate valves are designed to meet MSS SP-80 with the exception of the end connection. Male and female pressto-connect ends are new technology not yet covered in the current edition of this specification.

7 06

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.

179

2 00 51 6.21 2.83



PF-113 Press x Press Female End



PF-113 РхР



Dezincification Resistant

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[†] psi non-shock cold working pressure Maximum pressure / temperature: 180 psi at 200° F

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

NSF/ANSI-61-8 COMMERCIAL HOT 180°F (INCLUDES ANNEX F AND G) • NSF/ANSI-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. Leak Detect O-Ring (2) | EPDM | | | | | | | |
| | | | | | | | | |





PC-113-LF Press x Press Female End

DIMENSIONS—WEIGHTS—QUANTITIES

| | | | | | | | | 0101 | | | | ~ | <i>,,</i> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | | | | | | | |
|-------|-----|------|-------|-------|-------|------|-------|-------|-------|-------|-------|------|--|------|-------|------|-------|-------|------|----------|
| SI | ZE | | A | | В | | C | | D | | E | | F | | G | | Н | We | ght | Master |
| In. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | 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 |

† 200 psi for 2 1/2" and 3"

‡ No packing gland, packing only in this size.

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

Visit our website for the most current information.

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

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

NIRC

CONFORMS TO MSS SP-80

| | MA | FERIAL 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) | Bronze ASTM B 61 Alloy C92200 |
| 16. | O-Ring (2) | EPDM |

DIMENSIONS—WEIGHTS

| | | | | Dime | nsions | | | | | |
|-------|------|------|-------|----------|--------|------|-----|--------|------|--|
| Siz | Size | | Α | | 3 | _ | C | Weight | | |
| In. | mm. | In. | mm. | ln. | mm. | In. | 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 1/2 | 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 | |
| + N | | | later | a sala i | | | | | | |

† No packing gland, packing only in this size.

* Stem and disc (or disc holder) are integral.

NIBCO Press System globe valves are designed to meet MSS SP-80 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.

Visit our website for the most current information.

www.nibco.com Revised 7/25/2018



PF-211-Y Press x Press Female End







www.nibco.com Revised 7/25/2018

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

| | MA | TERIAL 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 | Silicon Bronze ASTM B 96 Alloy C65100 |
| 14. | Body | Bronze ASTM B 62 Alloy C83600 |
| 15. | Female Adapter (2) | Bronze ASTM B 61 Alloy C92200 |
| 16. | O-Ring (2) | EPDM |

| | DIMENSIONS—WEIGHTS | | | | | | | | | |
|-------|--------------------|------|-----|-------|--------|------|-----|--------|------|--|
| | | | | Dimer | nsions | | | | | |
| Size | | | В | I | ł | | J | Weight | | |
| In. | mm. | In. | 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 | |

† No packing gland, packing only in this size.

* Stem and disc or disc holder are integral.

NIBCO Press System angle valves are designed to meet MSS SP-80 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.





NIBCO INC. WORLD HEADQUARTERS • 1516 MIDDLEBURY ST. • ELKHART, IN 46516-4740 • USA • PH: 1.800.234.0227 TECH SERVICES PH: 1.888.446.4226 • FAX: 1.888.336.4226 • INTERNATIONAL OFFICE PH: +1.574.295.3327 • FAX: +1.574.295.3455 www.nibco.com

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: 100 psi at 250° F

Lead-Free marking: Double oval in body casting

NIBC

NSF/ANSI-61-8 COMMERCIAL HOT 180°F (INCLUDES ANNEX F AND G) • NSF/ANSI-372

| | MATERIAL 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. | O-Ring | EPDM | | | | | | |
| 11. | Press End Adapter | ASTM B75 Alloy C12200 | | | | | | |
| 12. | Crimp Evident Seal O-Ring | 304SS or 316SS | | | | | | |
| C: | 2/11 411 41/11 41/11 | | | | | | | |

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

DIMENSIONS—WEIGHTS

| | Dimensions | | | | | | | | |
|------|------------|--------|---------|------|--------|---------|------|------|--|
| SI | ZE | A (Lay | Length) | В (н | eight) | Master | We | ight | |
| ln. | mm. | ln. | mm. | In. | 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.

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.



www.nibco.com Revised 7/25/2018



Press Ends



PC-413-Y-LF Press x Press



Dezincification

Resistant





AHEAD OF THE FLOW®

www.nibco.com

Revised 1/7/2021

Lead-Free Bronze Ring Check[®] Valves

Features: Silicon Performance Bronze[®] Alloy • Inline Lift Type • Resilient Discs • Spring Actuated

Approvals: Conforms to MSS SP-139 • NSF/ANSI-61-8 Commercial Hot 180°F and NSF/ANSI-372

Size range: 1/2" - 2"

Pressure rating: 250 PSI non-shock cold working pressure Maximum pressure / temperature: 100 PSI at 300° F

Lead-free marking: Double oval in body casting

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 O-Ring | g EPDM |
| 8. | O-Ring | EPDM |
| 9. | Body | Silicon Bronze ASTM B584 Alloy C87600 |
| 10. | Body End | Silicon Bronze ASTM B584 Alloy C87600 |

DIMENSIONS—WEIGHTS—QUANTITIES

| | | | UIUI | | | | - 40 | | | |
|------|-----|-------|------|-------|-----|-------|------|-------------|------|----------|
| SI | ZE | - | A | E | 3 | C | | PC-480-Y-LF | | Master |
| In. | mm. | In. | mm. | In. | mm. | In. | mm. | Lbs. | Kg. | Ctn Qty. |
| 1/2 | 15 | 3.647 | 93 | 1.570 | 40 | 2.251 | 57 | 0.48 | 0.22 | 100 |
| 3/4 | 20 | 4.438 | 113 | 1.860 | 47 | 2.518 | 64 | 0.69 | 0.31 | 100 |
| 1 | 25 | 4.640 | 118 | 2.360 | 60 | 2.870 | 73 | 1.07 | 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 | | <u>A</u> B | | 3 | (| ; | PC-480 |)-W-LF | Master |
|------|-----|-------|------------|-------|-----|-------|-----|--------|--------|----------|
| In. | mm. | In. | mm. | In. | mm. | In. | mm. | Lbs. | Kg. | Ctn Qty. |
| 1/2 | 15 | 3.647 | 93 | 1.570 | 40 | 2.251 | 57 | 0.48 | 0.22 | 100 |
| 3/4 | 20 | 4.438 | 113 | 1.860 | 47 | 2.518 | 64 | 0.69 | 0.31 | 100 |
| 1 | 25 | 4.640 | 118 | 2.360 | 60 | 2.870 | 73 | 1.06 | 0.48 | 50 |
| 11/4 | 32 | 5.117 | 130 | 2.680 | 68 | 3.097 | 79 | 1.52 | 0.69 | 30 |
| 11/2 | 40 | 6.314 | 160 | 3.060 | 78 | 3.544 | 90 | 2.11 | 0.96 | 30 |
| 2 | 50 | 7.084 | 180 | 3.720 | 94 | 4.064 | 103 | 3.38 | 1.53 | 10 |

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

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

Do not use for reciprocating air compressor service.

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

Visit our website for the most current information.





NSF/ANSI 61 NSF/ANSI 372



PC-480-Y-LF PC-480-W-LF Press Ends

> PC-480-Y-LF PC-480-W-LF Press x Press

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

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(7 (8) (10) (11)PF-413-Y РхР

www.nibco.com Revised 7/25/2018

Dezincification

Resistant

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

| | M | 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) |
| | Seat Disc Washer | ASTM B 98 Alloy C65500 or ASTM B 103 |
| 11. | Female Adapter (2) | Bronze ASTM B 61 Alloy C92200 |
| 12. | O-Ring (2) | EPDM |

* Sizes 3/4" thru 2" only

NIBC

DIMENSIONS—WEIGHTS

Dimensions

| Size | | | Α | E | 3 | Weight | | |
|-------|-----|------|-----|------|-----|--------|------|--|
| In. | mm. | In. | mm. | In. | 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 System check valves are designed to meet MSS SP-80 with the exception of the end connection. Male and female pressto-connect ends are new technology not yet covered in the current edition of this specification.

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°).

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.





B

(12)



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. Stern | Alloy C30300 |
| 3. Spring | 316 Stainless Steel |
| 4. Disc Holder | Stainless Steel Type 301 |
| 5. Disc | PTFE |
| 6. Seat Screw | Stainless Steel ASTM A276 |
| 0. Sedi Sciew | Alloy S43000 |
| 7. Body End | Bronze ASTM B584 Alloy C84400 |
| 8. Adapter (2) | Bronze ASTM B61 Alloy C92200 |
| 9. O-Ring (2) | EPDM |
| | |

DIMENSIONS—WEIGHTS

| | Dimensions | | | | | | | | | | | | |
|-------|------------|------|-----|------|-----|------|----|------|------|--|--|--|--|
| Si | ize | | A | I | B | (| ; | Weig | yht | | | | |
| In. | mm. | In. | mm. | In. | mm. | In. | 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 1/2 | 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.

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-480-Y Press x Press Female End



PF-480-Y (PTFE Disc) P x P

AHEAD OF THE FLOW®

www.nibco.com

Revised 7/25/2018

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-8 COMMERCIAL HOT 180°F (INCLUDES ANNEX F AND G) AND NSF/ANSI-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. | O-Ring (2) | EPDM |
| 15. | Cap Screws | Carbon Steel |
| Availab | le with lock lever handle or | gear operator. |

DIMENSIONS — WEIGHTS

| S | ize | | | | | | | G | Metal | Rubber |
|------|-----|------|------|------|------|------|-----|------|-------|--------|
| In. | mm. | Α | В | C | D | E | F | Flat | Н | 1 |
| 21⁄2 | 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 65 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.



PFD-2000

Lug Style EPDM Liner and Aluminum Bronze Disc Press x Press Female End









NOT RECOMMENDED FOR STEAM SERVICE

Visit our website for the most current information.

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NIBCO[®] Press System Bronze Ball Valves

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



600 psi/41.4 bar non-shock cold working pressure 250°F maximum operating temperature

CONFORMS TO MSS SP-110

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 | Silicon Bronze ASTM B 371 Alloy C69430 |
| 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

| | | | _ | | | | | | | | |
|-------|-----|-------|-----|------|-----|---------|-----|------|-----|--------|------|
| Size | | | Α | | В | | C | | D | Weight | |
| In. | mm. | In. | mm. | In. | mm. | In. m | ım. | In. | mm. | Lbs. | Kg. |
| 1/2 | 15 | 6.56 | 167 | 1.88 | 48 | 7.25 1 | 84 | .50 | 13 | .73 | .99 |
| 3⁄4 | 20 | 7.25 | 184 | 2.25 | 57 | 8.25 2 | 210 | .75 | 19 | 1.50 | .68 |
| 1 | 25 | 7.75 | 197 | 2.38 | 60 | 8.63 2 | 219 | 1.00 | 25 | 2.05 | .93 |
| 1 1⁄4 | 32 | 9.06 | 230 | 3.00 | 76 | 9.19 2 | 233 | 1.25 | 32 | 3.64 | 1.65 |
| 1 1/2 | 40 | 9.99 | 254 | 3.16 | 80 | 11.69 2 | 297 | 1.50 | 38 | 5.73 | 2.60 |
| 2 | 50 | 10.72 | 272 | 3.50 | 89 | 12.06 3 | 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.

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

600 psi/41.4 bar non-shock cold working pressure 250°F maximum operating temperature Nominal sizes 1/2" through 1" are UL certified to NSF/ANSI 61

CONFORMS TO MSS SP-110

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 |
| | | |



| | Dimensions | | | | | | | | | | |
|-------|------------|-------|-----|------|-----|-------|-----|------|-----|--------|------|
| Size | | | Α | | В | | C | | D | Weight | |
| ln. | mm. | In. | mm. | In. | mm. | In. | mm. | In. | 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 1⁄2 | 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 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.

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.







Press x Press Male End



NIBCO[®] Press System Bronze Ball Valves

Two-Piece Body • Full Port • Bronze Trim • 3/4" Hose Connection with Cap and Chain • Blowout-Proof Stem

600 psi/41.4 bar non-shock cold working pressure 250°F maximum operating temperature

CONFORMS TO MSS SP-110

| | Ν | IATERIAL 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. | Сар | Die Cast Brass |
| 12. | Gasket | Rubber |
| 13. | Chain | Brass |
| 14. | Stub Out | Type "L" Copper Tube |



Press Male x Hose End

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

DIMENSIONS—WEIGHTS

| Size | | Α | | В | | (| C | Weight | |
|------|-----|------|-----|------|-----|------|-----|--------|-----|
| In. | mm. | In. | mm. | In. | mm. | In. | 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 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.

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.





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 | SPECIFIC | CATION | | | | | | |
| 1. Body | Bronze AS | TM B584 Alloy C84400 | | | | | | |
| 2. Cap | Bronze AS | TM B62 Alloy C83600 | | | | | | |
| 3. Gasket | PTFE | | | | | | | |
| 4. Screen | | 16 20 Mesh - 304 Stainless Steel or 4 Perforated - 304 Stainless Steel | | | | | | |
| 5. Plug | | Brass ASTM B16 Alloy C36000 or Bronze ASTM B584 Alloy C84400 | | | | | | |
| 6. Female Adapt | er (2) Bronze AS | TM B75 ALLOY C12200 | | | | | | |
| 7. O-Ring (2) | EPDM - Le | ak 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 | Size | | Α | (| C | D | Weight | | | | | |
| In. | In. mm. | | 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



P x P



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.

| CS Standard Lever Handle | CS Extended Lever Handle with Memory Stop Allows for 2" of Insulation | NIB-SEAL® Handle Allows for 2" of Insulation |
|---|---|---|
| | | |
| CS Locking Lever Handle | CS Round Handle | NIB-SEAL® Locking Extended Handle |
| SS Standard Lever Handle | CS Extended Round Handle Allows for 2" of Insulation | Vertical Chain Lever |
| SS Locking Lever Handle | CS Wing Handle | Horizontal Chain Lever |
| | | |
| CS Extended Lever Handle Allows for 2" of Insulation | Seat and Seal Kit | Memory Stop Kit |

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.

|**∑||=**₹|



reduce chance of condensate formation

keeping air from infiltrating the insulated

Indicator gives at-a-glance valve position

Memory stop plate and screws for system

Pre-formed hole for identification tag

Extension handle of durable non-thermal conductive material prevents formation of

Protective sleeve allows operation of valve handle and maintenance of valve packing while maintaining integrity of piping

NIBCO Press System bronze ball valve is an integral part of the NIB-SEAL valve

US PATENT 5,236,006

NIB-SEAL® Locking Handle

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

311=10

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

Temperature Range: 15° F to 250° F

Not intended for steam applications in excess of 15 psi.



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 identification tag

PROTECTIVE SLEEVE allows operation of valve handle and maintenance of valve packing while maintaining integrity of piping insulation

NIBCO BALL VALVE

* Padlock and cable lock not included

** Valve type showing above is just for handle representation

Visit our website for the most current information.

Dimensions

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

Factory installed only.

Order appropriate factory installed NIBCO valve figure number with suffix "LX". Example: T-585-70-LX, $\prime\!\!/_2$ "

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

U.S. PATENT 9,810,344



Butterfly Valve Options and Accessories

Lever-Lock Operator (Standard) PFD2000



The lever-lock handle and throttling plate provide throttling notches every 10^0 for excellent manual control in balancing up to 90^0 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.

| N | 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 Out | tput in Inch-Pounds |
|---|----------------|--------------------------|-------------------|-------------|---|--------------|---------------------------|-------------------|---------------------|
| Lever Size | Lever (STD) | Throttle Plate/ (STD) | Infinite Pos. Kit | A | В | C | D | At 60 pounds Pull | At 100 pounds Pull |
| 2 ¹ / ₂ "-3" | T115107PP | T115138PP | T114841FG | 10 ½ | 1 | 4 5⁄8 | 6 ³ ⁄16 | 540 In-Lbs. | 900 In-Lbs. |
| 4 | T115108PP | T115138PP | T114842FG | 10 ½ | 1 | 4 5⁄8 | 6 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) | | | | | | | | | GEAR OPERATOR ACCESSORIES & REPLACEMENT PARTS | | | | | | |
|--|------------------|-------|------------|------|-------|-------|-------|------|---|-----------------|-----------------|---------------------|-----------|-----------|-------------|
| PFD | GEAR OPERATOR | RATIO | GEAR OP | I | DIMEN | SIONS | (INCH | ES) | | STEM ADAPTER | SPROCKET RIM | SQUARE OPERATING | FLAG | MEMORY | REPLACEMENT |
| VALVE | NUMBER | | WEIGHT | Α | В | C | D | E | F | BUSHING | MODEL | NUT | INDICATOR | STOP KIT | HANDWHEEL |
| 21⁄2 - 3 | T117118PP | 24:1 | 10 | 7.64 | 1.77 | 5.04 | 4.24 | 5.91 | 2.79 | T046653PP | #1½ | T117792FC | T116682PP | T026196PP | T117122PP |
| 1 | T117118PP | 24·1 | 10 | 7.64 | 1 77 | 5.04 | 4.24 | 5 91 | 2 79 | T046654PP | #1½ | T117792FC | T116682PP | T026196PP | T117122PP |

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

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

Visit our website for the most current information.

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Butterfly Valve Technical Information

Valve Installation Procedure

Always position the connecting pipe flanges accurately in the line, allowing sufficient space between the flanges for the valve. Make sure the pipe flange faces are clean of any foreign material such as scale, metal shavings or welding slag. Valves should be installed with the disc in the closed position to prevent damage to sealing surfaces.

- 1. Carefully insert the valves between the pipe flanges. Do not apply any lubricants to the seat faces as this may damage them.
- 2. Line up, center and secure the valve between flanges using desired bolts or studs as listed in Table 4.
- Do not tighten bolts at this time.
- 3. Carefully open the valve to assure free unobstructed disc movement. Disc interference may result when valves are installed in pipelines having smaller than normal inside diameters, such as heavy wall pipe, plastic-lined pipe, as-cast flanges or reducing flanges. Interference can also occur when connecting directly to a swing check or silent check. Suitable corrective measures must be taken to remove these obstructions, such as taper boring the pipe or installing a spacer or spool piece.
- After proper operation is verified, tighten the bolts using a cross-over pattern (Fig. 1) to the minimum recommended bolt torques listed in Table 3.
- Pressurize piping to valve and inspect for leakage. If leakage is observed, tighten bolts using cross-over pattern, increasing torque until leak stops.
 DO NOT EXCEED MAXIMUM TORQUES LISTED IN TABLE 3.
- Recommended torques are made without warranty. Installer must verify proper strength bolts for application. Bolts shall be clean and un-lubricated.

Caution

- 1. Class 250 cast iron and Class 300 steel flanges can not be used on these valves.
- 2. Rubber faced or mechanical flanges are **not** recommended.
- 3. This valve is **not recommended** for steam service.
- 4. Valves should **not** be assembled to the flanges and then welded into the piping system.
- 5. Do not install EPDM liner in compressed air lines.

Table 3 Recommended Bolt Tightening Torques

| Flange Size | | Minimum Bolt Torque (ft.•lbs.) | Maximum Bolt Torque (ft.•lbs.) |
|----------------|------|-----------------------------------|-----------------------------------|
| 2 1/2"- 4" | 5/8" | 20 | 70 |

Bolt Tightening Cross Over Pattern



Suggested Bolting Method



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 B16.47 (SERIES A) CLASS 150 STEEL MSS SP-44 FLANGE THICKNESS | ANSI B16.47 (SERIES B) CLASS 150 STEEL WELD NECK FLANGE THICKNESS | ANSI B16.47 (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 |
|---|---------------------------|---|---|--|--|--|---|--|--------------------------|
| | | | | | | | 1 | 0.44 | |
| 0.4.(0) | 4.04 | 0.69 | | — | — | — | 1.50 | 8/4 | E /0 44 UNIO |
| 2 1/2" | 1.81 | 0.69 | 0.88 | | | | 1.50 1.75 | 8/4 8/4 | 5/8-11 UNC |
| , | - | 0.69 | 0.88 | | | | | | , |
| 2 1/2" 3" | 1.81 1.81 | | 0.88 0.94 | | | | 1.75 | 8/4 | 5/8-11 UNC 5/8-11 UNC |
| , | - | | _ | | | | 1.75 1.50 | 8/4 8/4 | |

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.

| Liı | Liner Temperature Ratings | | | | | | | |
|-----|---|------------------|--|--|--|--|--|--|
| Lii | ner Material | Temperature | | | | | | |
| EP | DM** | -20°F to + 250°F | | | | | | |
| ** | EPDM is rated at 250°F intermited 225°F continuous service. | ent service and | | | | | | |

Visit our website for the most current information.

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.

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NIBCO pressystem Tools, Jaws & Chains



NIBCO AHEAD OF THE FLOW®

www.nibco.com Revised 7/25/2018

NIBCO[®] Press System Tools

PC-280

1/2" through 4"



MATERIAL LIST

| MODEL | NO. DESCRIPTION | LBS. |
|---------|---|-------|
| PC-280 | 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 PC-100 or PC-280) | 4.14 |
| PC-11S | 3/4" Standard Pressing Jaw (for PC-100 or PC-280) | 4.18 |
| PC-12S | 1" Standard Pressing Jaw (for PC-100 or PC-280) | 4.52 |
| PC-13S | 1 1/4" Standard Pressing Jaw (for PC-100 or PC-280) | 4.30 |
| PC-14S | 1 1/2" Standard Pressing Jaw (for PC-100 or PC-280) | 9.61 |
| PC-15S | 2" Standard Pressing Jaw (for PC-100 or PC-280) | 9.26 |
| PC-16S | 1/2"-1 1/4" (4 jaws) Standard Press Jaw Kit w/Case (for PC-100 or PC-280) | 25.25 |
| PC-17S | 1 1/2"-2" (2 jaws) Standard Press Jaw Kit w/Case (for PC-100 or PC-280) | 23.76 |
| PC-2 | 2 1/2" Pressing Chain w/Case (for PC-100 or PC-280) | 18.58 |
| PC-3 | 3" Pressing Chain w/Case (for PC-100 or PC-280) | 19.40 |
| PC-4 | 4" Pressing Chain w/Case (for PC-100 or PC-280) | 23.81 |
| PC-234 | 2 1/2", 3" & 4" Pressing Chain Kit (for PC-100 or PC-280) | 44.42 |
| 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 PC-280 or PC-20M) | 1.30 |
| PC-8L | 110V Battery Charger (for PC-4ML or PC-7L) | 2.20 |
| PC-9L | AC Adapter (for PC-280 or PC-20M) | 1.70 |
| PC-280C | Plastic Replacement Case for PC-280 Tool | 7.50 |
| PC-2000 | 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



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





PC-280 Pressing Tool



PC-5 Pressing Chain Adapter Jaw



PC-8L 110V Battery Charger



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 AHEAD OF THE FLOW®

www.nibco.com Revised 7/25/2018

NIBCO[®] Press System Tools

PC-20M

Δ

1/2" through 1"

MATERIAL LIST

| MODEL | NO. DESCRIPTION | LBS. | | | | | | |
|---------|--|-------|--|--|--|--|--|--|
| PC-20M | Mini Pressing Tool, 2 - 18V, 2.0 Ah Lithium-ion batteries, 110V charger & case (NO jaws) | 10.10 | | | | | | |
| PC-200M | Mini Pressing Tool, 3 Jaws, 2 - 18V, 2.0 Ah Lithium-ion batteries, 110V charger & case | 17.20 | | | | | | |
| DO 114 | 4/01 L | 0.00 | | | | | | |
| PC-1M | 1/2" Jaw (for Mini Pressing Tool - PC-10M or PC-20M) | 2.09 | | | | | | |
| PC-2M | 3/4" Jaw (for Mini Pressing Tool - PC-10M or PC-20M) | 2.05 | | | | | | |
| PC-3M | -3M 1" Jaw (for Mini Pressing Tool - PC-10M or PC-20M) | | | | | | | |
| | | | | | | | | |
| PC-4ML | 18V, 2.0Ah Lithium-ion Battery (for PC-20M) | 0.85 | | | | | | |
| PC-7L | 18V, 3.0Ah Lithium-ion Battery (for PC-280 or PC-20M) | 1.30 | | | | | | |
| PC-8L | 110V Battery Charger (for PC-4ML and PC-7L) | 2.20 | | | | | | |
| PC-9L | AC Adapter (for PC-280 or PC-20M) | 1.70 | | | | | | |
| | | | | | | | | |
| PC-20MC | Plastic Replacement Case for PC-10M & PC-20M) | 4.00 | | | | | | |
| PC-50 | 1/2" - 1" Deburring Tool | 0.42 | | | | | | |
| | | | | | | | | |



PC-20M Mini Pressing Tool



PC-200M Mini Pressing Tool with 1/2", 3/4" and 1" Jaws



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



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





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



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



PC-8L



PC-9L AC Adapter



Visit our website for the most current information.

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NIBCO[®] Press System Tools

PC-280 & PC-20M FEATURES

<u>T00LS</u>

Light weight

PC-20M Mini: 3.7 lbs. (without jaw) 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 Mini Pressing Tool | 0.85 |
| PC-5M | 120V Charger for 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 approved pressing tools, chains and jaws with the NIBCO Press System fittings and valves: | | 1/2" - 1" NIBCO® Press System Mini Pressing Jaws (PC-1M, PC-2M, PC-3M) | 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 Jaws | Stanley [®] VIRAX [®] Press Inserts | 1/2" - 1 1/4" Milwaukee® M12™ Pressing Jaws | 1/2" - 2" NIBCO® Press System Standard Pressing Jaws (PC-10S, PC- 11S, PC-12S, PC-13S, PC-14S, PC-15S) | 1/2" - 2" RIDGID® ProPress® Standard Pressing Jaws | 1/2" - 1-1/4" RIDGID® ProPress® V1 Kit (V1 Actuator & Press Rings) | 1/2" - 2" Rothenberger Standard Pressing Jaws | 1/2" 2" REMS Standard Pressing Jaws | Stanley® VIRAX® Pressing Jaws | 1/2" - 2" Milwaukee® M18™ Pressing Jaws | 1/2" - 2" DEWALT DCE200 Pressing Jaws | 2 1/2" - 4" NIBCO® Pressing Chains (PC-2, PC-3, PC-4) |
|---|--|---|--|---|------------------------------------|---|--|--|---|---|--|-------------------------------------|-------------------------------|--|--|--|
| | SIZE | | | 1/2" - 1 | " | | | | | 1 | /2" - 2 | " | | | | 2 ½″ - 4″ |
| | NIBCO [®] PC-280 | | | | | — | | YES | YES | YES | YES | YES | YES | | | YES |
| | NIBCO [®] PC-100 | | | | _ | — | | YES | YES | YES | YES | YES | YES | | | YES |
| | RIDGID [®] 320-E | | | | _ | — | _ | YES | YES | YES | | _ | _ | | | |
| | RIDGID [®] RP 330-B | | | | | — | | YES | YES | YES | | _ | — | | | |
| | RIDGID [®] CT400 | | | | | — | | YES | YES | YES | — | | — | | | |
| | RIDGID [®] RP 330-C | | | | | — | | YES | YES | YES | | _ | — | _ | | |
| | RIDGID [®] RP 340 | | | | _ | — | | | YES | | — | | — | | | |
| PRESSING TOOLS | Rothenberger ROMAX [®] Pressliner | | | | | — | | | | | YES | _ | _ | _ | | |
| 10 | Rothenberger ROMAX [®] AC ECO | | | | | — | | | | | YES | _ | — | | | |
| DN | REMS Akku-Press | | _ | | _ | — | — | | | | — | YES | | | | |
| ESS | REMS Power-Press | | | | | — | | | | | | YES | _ | | | — |
| PR | Stanley® VIRAX® P20+ | _ | _ | | _ | — | | | | | — | | YES | | | |
| | DEWALT DCE200 | | | | | — | | YES | | | | | — | | YES | |
| | NIBCO [®] PC-20M Mini | YES | | | YES | — | | | | | _ | | | | | — |
| | NIBCO [®] PC-10M Mini | YES | | | YES | _ | | — | | | — | | | | | — |
| | RIDGID [®] 100-B Compact | | YES | YES | _ | — | — | — | | | — | — | — | _ | | — |
| | RIDGID [®] RP 210-B Compact | | YES | YES | | — | | | | | — | | | | | |
| | RIGID [®] RP 200-B | | YES | YES | | _ | $\lfloor - \rfloor$ | | | | | | | | | |
| | Rothenberger Compact | YES | | | YES | | | _ | | | | | _ | | | — |
| | Stanley [®] VIRAX [®] M20+ Compact | | | | | YES | | | | | — | | | | | |
| | Milwaukee® M12™ Force Logic™ | _ | | | _ | _ | YES | — | | | _ | _ | _ | | | — |
| | Milwaukee® M18™ Force Logic™ | _ | _ | | — | — | _ | _ | | | _ | _ | — | 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

VIRAX® 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.



NIBCO pressystem Engineering Data

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 $\underline{\text{NOT}}$ 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 B584-12a Alloy C87600 and C84400
- Elastomeric Seals
 - EPDM O-rings compliant with IAPMO PS-117 and ASME B16.51

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



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

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
 - a. 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
 - a. 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 harddrawn 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
 - a. 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
 - a. 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.

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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). Nonasbestos 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 pressto-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 CWP to +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 pressystem Installation Instructions

NIBCO[®] Press System — Installation Instructions

NIBCO Press System

NIBC

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 ⁽¹⁾. 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.

Chemical Compatibility

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.

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.

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

1. 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 | lepth (min.) |
|-----------|-------------|--------------|
| Inches | Inches | mm |
| 1/2 | 11/16 | 18 |
| 3/4 | 7/8 | 22 |
| 1 | 7/8 | 22 |
| 11⁄4 | 1 | 25 |
| 11/2 | 13⁄8 | 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.

NIBCO[®] Press System — Installation Instructions

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

5. 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

1. 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.
- 2. 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.

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

1. 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

 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 <u>should not be used</u>.)

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.

2. 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.

| | BCO® Press S ertion Depth | | |
|------------------------|------------------------------|--------------------|--------------------|
| Tube Size | 2 ¹ /2" | 3″ | 4″ |
| Insertion Depth (min.) | 1 ¹ /2″ | 1 ⁵ /8″ | 2 ¹ /8″ |

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.

NIBCO® Press System — Installation Instructions

Crimping a NIBCO Press System Fitting or Valve

<u>CAUTION:</u>

NIBC

- 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

 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).



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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.
- 6. With the pressing tool perpendicular to the tube, begin the pressing cycle by pulling the trigger of the pressing tool.
- 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.
- 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. Pressurize system up to 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 O-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 of 200 psi hydrostatic.

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.

NIBCO[®] Press System — Installation Instructions

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.



| | A (m | in.) |
|-----------|--------|------|
| Tube Dia. | Inches | mm |
| 1/2"* | 0 | 0 |
| 3/4"* | 0 | 0 |
| 1"* | 0 | 0 |
| 11/4"* | 0 | 0 |
| 11/2"* | 0 | 0 |
| 2"* | 0 | 0 |
| 21/2" | 3/8" | 10 |
| 3" | 3/8" | 10 |
| 4" | 3/8" | 10 |

*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 EPDM seal. If there is any concern about heat damage to the O-ring, a cold, wet cloth should be wrapped around the crimped connection prior to soldering or brazing.

Spacing

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

Clearance Requirements — Standard Jaw Sets

Tool perpendicular to wall



| Tube Die | A (m | in.) | B (min.) | |
|-------------------|-------------------|------|-------------------|-----|
| Tube Dia. | Inches | mm | Inches | mm |
| 1/2 | ¹⁵ /16 | 24 | 15/8 | 41 |
| 3/4 | 7/8 | 22 | 2 ¹ /8 | 54 |
| 1 | 1 ¹ /4 | 31 | 2 ¹ /2 | 64 |
| 1 ¹ /4 | 1 ¹ /8 | 29 | 27/8 | 73 |
| $1^{1}/_{2}$ | 2 | 51 | $4^{3}/8$ | 111 |
| 2 | 2 | 51 | $4^{3}/8$ | 111 |

Tool angled to wall



| Tube Dia. | A (m | nin.) | B (m | in.) | C (n | nin.) | |
|--------------------------------------|--------------------------|-------|--------------------------|------|-------------------|-------|--|
| Tube Dia. | Inches | mm | Inches | mm | Inches | mm | |
| 1/2 | 1 ¹ /8 | 28 | 1 ³ /8 | 35 | 2 ¹ /2 | 64 | |
| ³ /4 | 1 | 26 | 1 ¹ /2 | 38 | 2 ¹ /2 | 64 | |
| 1 | 1 ⁵ /16 | 34 | 1 ³ /4 | 45 | 3 | 76 | |
| 1 ¹ /4 | 1 ¹ /4 | 32 | 2 ¹ /4 | 57 | 3 ¹ /8 | 80 | |
| 1 ¹ / ₂ | 2 ¹ /8 | 54 | 3 ¹ /8 | 80 | 5 | 127 | |
| 2 | 2 ¹ /8 | 54 | 3 ¹ /8 | 80 | 5 | 127 | |
| 2 ¹ /2 | 35/8 | 92 | 37/8 | 98 | 5 ³ /8 | 137 | |
| 3 | 37/8 | 98 | 4 ³ /4 | 120 | 6 ⁷ /8 | 175 | |
| 4 | 5 | 127 | 5 ¹ /2 | 140 | 7 ⁷ /8 | 200 | |

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

Visit our website for the most current information.

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NIBCO[®] Press System — Frequently Asked Questions

What is the NIBCO product offering?

The 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?

The 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. The 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 the 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 the 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 the NIBCO Press System approved for underground use?

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

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

Yes, the NIBCO Press System is typically compatible. For specific cleaning agent compatibility, contact NIBCO Technical Services at the below noted number.



NIBCO[®] Press System Limited Warranty

NIBCO INC. warrants:

- NIBCO Press System fittings and flanges to be free from defects in materials and workmanship under normal use and service for a period of 50 years from the Warranty Commencement Date. The Warranty Commencement Date for NIBCO Press system fittings and flanges shall be the date upon which the fitting or flange is installed.
- NIBCO Press System pressure rated metal valve to be free from defects in materials and workmanship under normal use and service for a period of five (5) years from date put into service with the exception of models PC-FP-600A-LF for which a two (2) year warranty period from date put into service applies.

This limited warranty applies to all NIBCO Press System products installed in accordance with NIBCO's approved and published installation, testing and application recommendations and instructions. This includes product installed in accordance with the Press Tool & Jaw Compatibility Matrix in effect at the time of installation as published in the most current online version of the NIBCO Press System Catalog.

NIBCO does NOT warrant against failure of NIBCO Press System fittings, flanges and valves (referred to hereafter as "product") for:

- 1. any product, parts or systems which are not manufactured or sold by NIBCO, INC.;
- 2. any product which is used for purposes other than a purpose authorized by NIBCO INC.;
- 3. any product not installed in accordance with either the recommended installation guidelines provided by NIBCO INC. and/or applicable plumbing codes;
- 4. damage to the product caused by, contributed in whole or in part by, or resulting from, any of the following:
 - a. abuse, misuse, mishandling, 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 to the product that are not authorized by NIBCO INC.
 - d. external causes, where external, physical or chemical qualities produce damage to the product, such as, without limitation, variation in water quality, aggressive water or an unsuitable or hostile environment, or
 - e. any other cause beyond the control of NIBCO INC.

NIBCO shall NOT be liable under any circumstances for any other direct or indirect, incidental or consequential damages of any kind, including but not limited to loss of business, lost profits, mold intrusion, water damage, etc. The liability of NIBCO under this warranty is solely limited to the replacement of any product that has been determined by NIBCO INC., or an authorized representative or agent thereof, to contain a defect in material or workmanship.

NIBCO Press System tools are covered by a limited warranty against defects in material or manufacturing for a period of two (2) years from date of purchase by the contractor. This limited warranty covers the repair or replacement of the tool, at NIBCO's discretion, if NIBCO has received the tool, inspected it, and the tool is found to be defective.

This warranty is the only warranty for the product provided by NIBCO INC., 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, and for all other obligations or liabilities on the part of the Manufacturer. No employee of NIBCO INC., or any other distributor, agent or other person or business, is authorized to make any other warranty on behalf of NIBCO, INC.

In the event any defect occurs which is believed to be covered by this warranty, NIBCO Technical Services should be immediately contacted either in writing or by telephone at 888.446.4226. NIBCO Technical Services will make further arrangements for the product's return to NIBCO INC. for review and evaluation. In the event that a returned product is determined by NIBCO INC. to be defective, NIBCO INC. will remediate the failure by repairing or replacing the product within a reasonable time, without charge to the owner of the product.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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 determination 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.

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.

globally connecting

you at all levels

It's a new age of business, and a new way at NIBCO. From Elkhart. Indiana to Lodz, Poland, and points beyond, our company has integrated manufacturing, distribution, and networked communications to provide a seamless source of information and service, 24 hours a day, 7 days a week. But this integration hasn't happened overnight. It's been part of a longterm strategic process that has pushed us to reconsider every aspect of our business. The result? We're a vertically integrated manufacturer with the products and systems in place to deliver low cost and high quality. NIBCO products are manufactured under a Quality Management System conforming to the current revision of ISO-9001 International Standards. We know the flow control industry is only going to get more demanding, and we are more than ready. We will continue to lead. That's what NIBCO is all about



VALVES



Pressure-rated bronze, iron and alloy-iron gate, globe and check valves • Pressurerated bronze ball valves • Boiler specialty valves • Commercial and industrial butterfly valves • Lined butterfly valves • Circuit balancing valves and kits • Carbon and stainless steel ball valves • ANSI flanged steel ball valves • Lined ball valves • Pneumatic and electric actuators and controls • Grooved ball and butterfly valves • High performance butterfly valves • UL/FM fire protection valves MSS specification values
Bronze specialty values
Low pressure gate, globe, check and ball valves • Frostproof sillcocks • Quarter-turn supply stops • Quarterturn low pressure valves • PVC and CPVC plumbing and industrial ball valves • Bronze and iron y-strainers • Sample valves • Sanitary valves • Lead-free valves Hydronic valves
Labor saving valves
Manifold systems
Water temperature control valves • System quality valves • Press x PEX transition valves

FITTINGS

Wrot and cast copper pressure and drainage fittings • Cast copper alloy flanges • Powder coated steel companion flanges • Wrot and cast press fittings • ABS and PVC DWV fittings • Schedule 40 PVC pressure fittings • CPVC CTS fittings • CPVC CTS-to-metal transition fittings • Schedule 80 PVC and CPVC systems • Lead-free fittings • Press x PEX transition fittings • Cast bronze push fittings

LEAD-FREE: Weighted average lead content ≤0.25%

FLEXIBLE PIPING SYSTEMS

PE-RT and PEX tubing for potable and radiant applications • Insulated tubing • Risers • Ice maker tubing • Silicon Performance Bronze® fittings • Poly alloy fittings Home Run Manifold[®]
Radiant heat manifolds
Ball valves and supply stops Connections, tools and accessories • Radiant heat controls and panels

INDUSTRIAL PLASTICS

PVC and Corzan® CPVC schedule 80 fittings, true union ball and ball check valves, butterfly valves, and specialty valves • Polypropylene and Kynar® PVDF schedule 80 pipe, fittings, and true union ball and ball check valves • Pneumatic and electric actuation systems

Corzan® CPVC is a registered trademark of Lubrizol Advanced Materials Kynar® is a registered trademark of Arkema Inc.





EDI-Electronic Data Interchange • VMI-Vendor Managed Inventory • NIBCO.com • NIBCOpartner.com

eNIBCO



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