



## Submittal Package

Job Name \_\_\_\_\_ Contractor \_\_\_\_\_

Job Location \_\_\_\_\_ Wholesaler \_\_\_\_\_

Engineer \_\_\_\_\_ NIBCO Sales Rep \_\_\_\_\_

- |  |   |   |   |
|--|---|---|---|
| <input type="checkbox"/> Potable Water               | <input type="checkbox"/> Hydronic Heating     | <input type="checkbox"/> Chilled Water  | <input type="checkbox"/> Cooling Water  |
| <input type="checkbox"/> Compressed Air (dry system) | <input type="checkbox"/> Oxygen (non-medical) | <input type="checkbox"/> Nitrogen       | <input type="checkbox"/> Carbon Dioxide |
| <input type="checkbox"/> Argon                       | <input type="checkbox"/> Hydrogen             | <input type="checkbox"/> Vacuum Systems |   |

### PRODUCT DESCRIPTION

NIBCO<sup>®</sup> mechanical press copper fittings for use in plumbing or mechanical applications. Available sizes range from ½" through 4" in diameter. Product is designed to join ASTM B88 (Types K, L, M) hard drawn copper tube (½" through 4") as well as soft copper tube (½", ¾" and 1"). Fittings are approved for installations in both above and below ground applications. Per code, local inspector approval must be obtained prior to installation below ground.

### STANDARDS AND CODES

- Uniform Plumbing Code\*: UPC
- Uniform Mechanical Code\*: UMC
- ASME B16.51 Performance
- State of Massachusetts (Plumbing)
- International Residential Code<sup>®</sup>
- International Mechanical Code<sup>®</sup>
- International Plumbing Code<sup>®</sup>

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### THIRD PARTY LISTINGS AND CERTIFICATIONS

- NSF/ANSI 61
- NSF/ANSI 372
- ASME B16.51 (½" through 2")
- IAPMO PS-117
- ICC-ES LC 1002
- International Code Council-Evaluation Service PMG 1098
- American Bureau of Shipping

### OPERATING PARAMETERS

- Operating Pressure: 200 PSI maximum
- Water Test Pressure: 50 PSI maximum
- Air Test Pressure: 15 PSI maximum
- Operating Temperature: -20°F through 250°F

*Visit our website for the most current information.*

# Press Fitting Applications Chart

Types of Service	Comments	Pressure	Temperature	Compatible with EPDM Seal
<b>Fluids/Water</b>				
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	Up to 50% Ethylene Glycol/Propylene Glycol solution appropriate for the application temperature range	200 PSI	-20°F to 250°F	●
Hydronic Heating		200 PSI	-20°F to 250°F	●
Cooling Water		200 PSI	-20°F to 250°F	●
Ethanol		200 PSI	-20°F to 250°F	●

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

## Third Party Agency Approvals

[NSF Mechanical Performance](#)  
[NSF Drinking Water System Components](#)

[ICC Evaluation Service PMG-1098](#)  
[State of Massachusetts](#)

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# 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:

	SIZE	1/2" - 1 1/4"					1/2" - 2"										2 1/2" - 4"
		1/2" - 1" NIBCO® Press System Pressing Jaws (PC-1M, PC-2M, PC-M3)	1/2" - 1 1/4" Milwaukee® M12™ Pressing Jaws	1/2" - 1" RIDGID® ProPress® Compact Pressing Jaws	1/2" - 1 1/4" RIDGID® ProPress® C1 Compact Kit (C1 Actuator & Press Rings)	Rothenberger Compact Pressing Jaws	Stanley® VIRAX® Press Inserts	1/2" - 2" NIBCO® Press System Standard Pressing Jaws (PC-10S, PC-11S, PC-12S, PC-13S, PC-14S, PC-15S)	1/2" - 2" Milwaukee® M18™ Press System Standard Pressing Jaws	1/2" - 2" RIDGID® ProPress® Press System Standard Pressing Jaws	1/2" - 2" RIDGID® ProPress® V1 & V2 Standard Kits (Actuator & Press Rings)	1/2" - 2" DEWALT® DCE200 Press System Standard Pressing Jaws	1/2" - 2" REMS® Press System Standard Pressing Jaws	1/2" - 2" Rothenberger® Press System Standard Pressing Jaws	1/2" - 2" Stanley® VIRAX® Press System Standard Pressing Jaws	2 1/2" - 4" NIBCO® Pressing Chains (PC-5 Adaptor & PC-2, PC-3, PC-4 Chains)	
<b>Compact Pressing Tools</b>	NIBCO® PC-10M Mini	YES	—	—	—	YES	—	—	—	—	—	—	—	—	—	—	
	NIBCO® PC-20M Mini	YES	—	—	—	YES	—	—	—	—	—	—	—	—	—	—	
	PC-20M Mini	—	YES	—	—	—	—	—	—	—	—	—	—	—	—	—	
	RIDGID® 100-B Compact	—	—	YES	YES	—	—	—	—	—	—	—	—	—	—	—	
	RIDGID® RP200-B Compact	—	—	YES	YES	—	—	—	—	—	—	—	—	—	—	—	
	RIDGID® RP210-B Compact	—	—	YES	YES	—	—	—	—	—	—	—	—	—	—	—	
	RIDGID® RP240 Compact	—	—	YES	YES	—	—	—	—	—	—	—	—	—	—	—	
	RIDGID® RP241 Compact	—	—	YES	YES	—	—	—	—	—	—	—	—	—	—	—	
	Rothenberger® Compact	YES	—	—	—	YES	—	—	—	—	—	—	—	—	—	—	
Stanley® VIRAX® M20+ Compact	—	—	—	—	—	YES	—	—	—	—	—	—	—	—	—		
<b>Standard Pressing Tools</b>	NIBCO® PC-100	—	—	—	—	—	—	YES	YES	YES	YES	YES	YES	YES	YES	YES	
	NIBCO® PC-280	—	—	—	—	—	—	YES	YES	YES	YES	YES	YES	YES	YES	YES	
	Milwaukee® M18™ Force Logic™	—	—	—	—	—	—	YES	YES	—	—	—	—	—	—	—	
	Milwaukee® M18™ Force Logic™ (Long Throw)	—	—	—	—	—	—	YES	YES	—	—	—	—	—	—	—	
	RIDGID® CT 400	—	—	—	—	—	—	YES	—	YES	YES	—	—	—	—	—	
	RIDGID® RP 320-E	—	—	—	—	—	—	YES	—	YES	YES	—	—	—	—	—	
	RIDGID® RP 330-B	—	—	—	—	—	—	YES	—	YES	YES	—	—	—	—	—	
	RIDGID® RP 330-C	—	—	—	—	—	—	YES	—	YES	YES	—	—	—	—	—	
	RIDGID® RP 340	—	—	—	—	—	—	YES	—	YES	YES	—	—	—	—	—	
	RIDGID® RP 342 XL	—	—	—	—	—	—	YES	—	YES	YES	—	—	—	—	—	
	RIDGID® RP 350	—	—	—	—	—	—	YES	—	YES	YES	—	—	—	—	—	
	RIDGID® RP 351	—	—	—	—	—	—	YES	—	YES	YES	—	—	—	—	—	
	DEWALT® DCE200	—	—	—	—	—	—	YES	—	—	—w	—	—	—	—	—	
	REMS® Akku-Press	—	—	—	—	—	—	—	—	—	—	YES	—	—	—	—	
	REMS® Power-Press	—	—	—	—	—	—	—	—	—	—	—	YES	—	—	—	
	Rothenberger® ROMAX® Pressliner	—	—	—	—	—	—	—	—	—	—	—	YES	YES	—	—	
	Rothenberger® ROMAX® AC ECO	—	—	—	—	—	—	—	—	—	—	—	—	YES	—	—	
Stanley® VIRAX® P20+	—	—	—	—	—	—	—	—	—	—	—	—	—	YES	—		

For the latest listing of approved pressing tool, jaw and chain combinations, visit [nibco.com](http://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 registered 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 (2 1/2", 3", 4" ends) to be installed **ONLY** with NIBCO pressing tools & chains.

Visit our website for the most current information.

# 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).

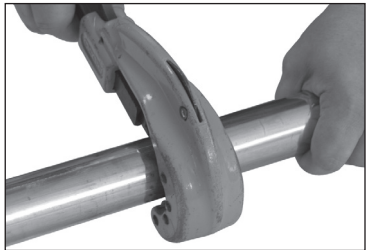


Figure 1 — Cut tube to desired length

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

### 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.

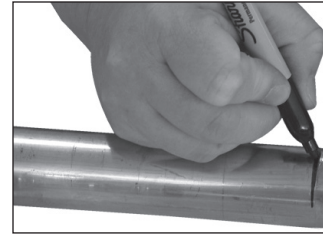


Figure 3 — Marking for Insertion Depth

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 Depth (min.)	
	Inches	mm
1/2	11/16	18
3/4	7/8	22
1	7/8	22
1¼	1	25
1½	1¾	35
2	1½	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.

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# 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).

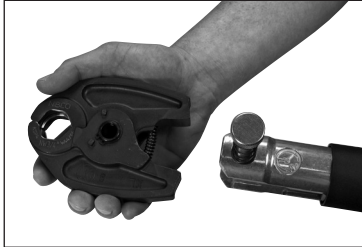


Figure 5 — Inserting the NIBCO® Press System jaw

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).

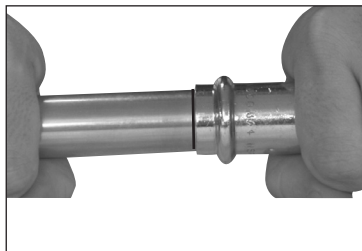


Figure 6 — Inserting the tube to proper depth

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.

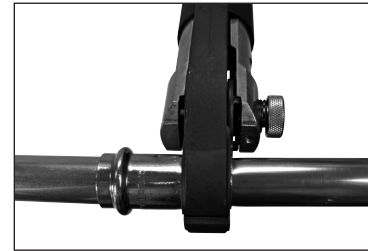


Figure 8 — Jaw set should be square to tubing

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 integrity testing instructions for fittings and valves in this catalog.

Visit our website for the most current information.

# 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 a tube cutter

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

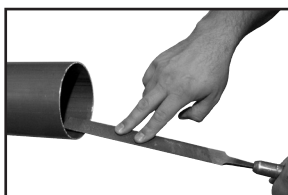


Figure 2: Deburr inside diameter using a half-round file



Figure 3: Deburr inside diameter deburring tool

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

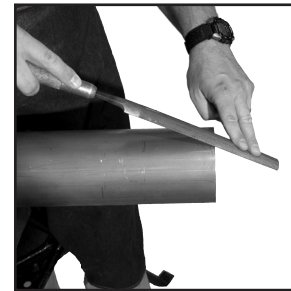


Figure 4: Deburr outside diameter using a half-round file

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

### Inserting the Tube into the Fitting or Valve

1. 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 prior to insertion, based on insertion depth chart. Refer to minimum insertion depth table for correct depths.

NIBCO® Press System Insertion Depth Chart			
Tube Size	2 1/2"	3"	4"
Insertion Depth (min.)	1 1/2"	1 5/8"	2 1/8"

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

Visit our website for the most current information.

# NIBCO® Press System — Installation Instructions

## Crimping a NIBCO Press System Fitting or Valve

### CAUTION:

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

- NIBCO PC-100 and PC-280 pressing tools
- NIBCO PC-5 adapter jaw
- NIBCO pressing chain - 2½" (PC-2), 3" (PC-3), 4" (PC-4)

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



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

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



Figure 7: Placement of adapter jaw into the tool

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



Figure 8: Placement of adapter jaw into pressing chain

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

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

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

### Inspecting the Crimp

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



Figure 9: Inspection of final crimp

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

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

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

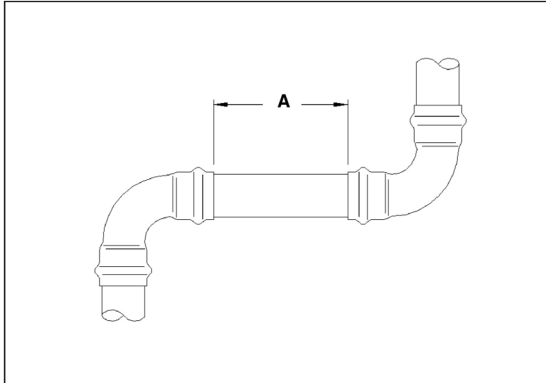
3. Test the NIBCO Press System in accordance with crimp integrity testing instructions for fittings and valves in this catalog.

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# 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.



Tube Dia.	A (min.)	
	Inches	mm
1/2**	0	0
3/4**	0	0
1**	0	0
1 1/4**	0	0
1 1/2**	0	0
2**	0	0
2 1/2"	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 supported 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.

## Annealing of Copper Tube

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.

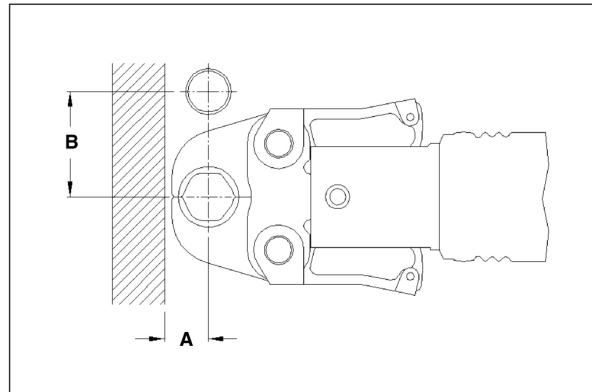
**CAUTION** — Brazing or soldering should not be conducted within 12" of an existing NIBCO Press System connection as this may damage the EPDM seal. If there is any concern about heat damage to the o-ring, a cold, wet cloth should be wrapped around the crimped connection prior to soldering or brazing.

## Spacing

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

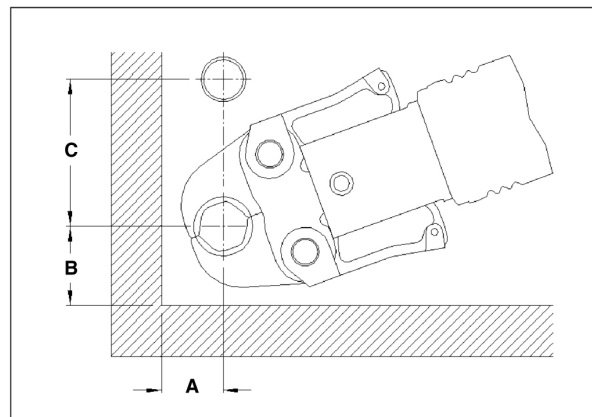
Clearance Requirement — NIBCO Standard Sets

### Tool perpendicular to wall



Tube Dia.	A (min.)		B (min.)	
	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	2 7/8	73
1 1/2	2	51	4 3/8	111
2	2	51	4 3/8	111

### Tool angled to wall



Tube Dia.	A (min.)		B (min.)		C (min.)	
	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	3 5/8	92	6	152	3 1/2	89
3	3 7/8	98	6 1/2	165	4	102
4	4 7/8	124	7 5/8	194	4 1/4	108

**NOTE:** Clearance dimensions for 2 1/2", 3" & 4" are for wrapping pressing chains around fittings.

Visit our website for the most current information.



# NIBCO® Press System Limited Warranty

## NIBCO INC. LIMITED WARRANTY

Applicable to NIBCO Press System

NIBCO INC. warrants each NIBCO Press System fitting and flange to be free from defects in materials and workmanship under normal use, service, and maintenance in accordance with the product specifications (including, but not limited to installation recommendations) for a period of fifty (50) years from the Warranty Commencement Date. The Warranty Commencement Date shall be the date of installation.

NIBCO Press System pressure rated metal valves to be free from defects in materials and workmanship under normal use, service, and maintenance in accordance with the product specifications (including, but not limited to installation recommendations) for a period of five (5) years from the Warranty Commencement Date, except for model PC-FP-600A-LF for which a period of two (2) years from the Warranty Commencement Date shall apply. The Warranty Commencement Date shall be the date of installation.

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

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

NIBCO will repair or replace – at its option and at no charge – NIBCO Products that have been determined by NIBCO, or an authorized representative or agent thereof, to have failed solely because of a defect in materials or workmanship under normal use, service, and maintenance during the warranty period. Replacements shall be shipped free of charge to the owner.

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

This warranty does not cover any failure or damage for or caused by:

1. any product, parts, or systems which are not manufactured or sold by NIBCO;
2. any NIBCO Product which is used for purposes other than a purpose authorized by NIBCO;
3. any NIBCO Product not installed, tested, applied, used, or maintained in accordance with NIBCO's recommended installation guidelines and instructions;
4. any NIBCO Product not installed or used in accordance with applicable codes;
5. any damage caused by, contributed in whole or in part by, or resulting from, any of the following:
  - a. abuse, misuse, mishandling, alteration, tampering, neglect, or accidental damage such as, without limitation, vandalism;
  - b. natural disasters, such as, without limitation, flooding, windstorm, and lightning;
  - c. attachments or modifications not authorized by NIBCO;
  - d. external, physical or chemical qualities, or an unsuitable or hostile environment;
  - e. any defects other than those in material or workmanship; or
  - f. any other cause beyond the control of NIBCO.

NIBCO DISCLAIMS ANY AND ALL LIABILITY FOR ANY OTHER DIRECT OR INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND, INCLUDING BUT NOT LIMITED TO, ECONOMIC LOSS, LOSS OF BUSINESS, LOST PROFITS, PUNITIVE DAMAGES, MOLD INTRUSION, WATER DAMAGE, ETC.

Some states do not allow the exclusion or limitation of damages, so the above limitation or exclusion may not apply to you.

THIS WARRANTY IS THE ONLY WARRANTY FOR THE NIBCO PRODUCTS PROVIDED BY NIBCO, AND IS AND SHALL BE IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, AN IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND FOR ALL OTHER OBLIGATIONS OR LIABILITIES ON THE PART OF A MANUFACTURER. NO EMPLOYEE OF NIBCO, OR ANY OTHER DISTRIBUTOR, AGENT, OR OTHER PERSON OR BUSINESS, IS AUTHORIZED TO MAKE ANY OTHER WARRANTY ON BEHALF OF NIBCO.

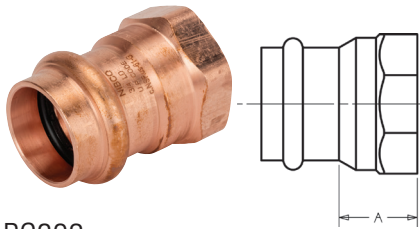
Some states do not allow limitations on implied warranties, so the above limitation may not apply to you.

In the event any defect occurs which is believed to be covered by this warranty, NIBCO Technical Services must immediately be contacted by calling 888.446.4226 or emailing CS-TechnicalServices@nibco.com. NIBCO Technical Services after being contacted will make further arrangements for the product's return to NIBCO at the customer's expense for review and evaluation.



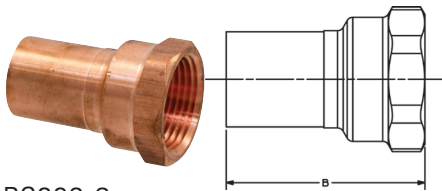
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**ADAPTERS**



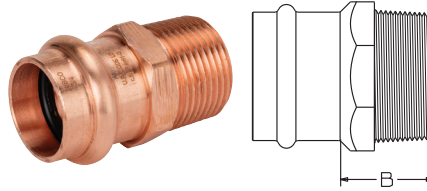
**PC603**  
Adapter P x F – Wrot

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	13/16
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



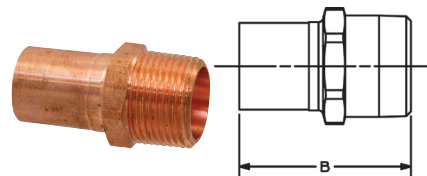
**PC603-2**  
Extended Adapter FTG x F – Wrot

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 – Wrot

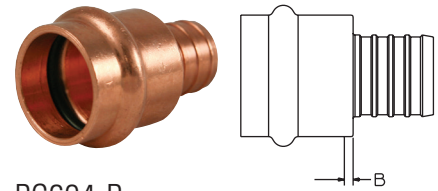
NOM. SIZE	APPROX. NET WT./LBS.	DIM. B INCHES
1/2	.103	7/8
1/2 x 3/8	.105	27/32
1/2 x 3/4	.191	1 1/4
3/4	.180	1 1/16
3/4 x 1/2	.189	31/32
3/4 x 1	.268	1 3/16
1	.255	1 3/32
1 x 3/4	.253	1 1/32
1 x 1 1/4	.457	1 17/32
1 1/4	.467	1 13/32
1 1/4 x 1	.335	1 3/16
1 1/4 x 1 1/2	.537	1 1/2
1 1/2	.696	1 1/2
1 1/2 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



**PC604-2**  
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	2 5/16
1 1/4	0.408	2 17/32
1 1/2	0.530	2 7/8
2	0.782	3 11/32

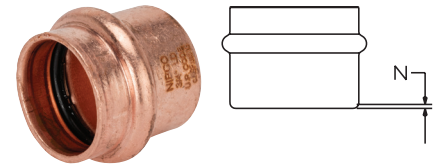
**ADAPTERS (Cont.)**



**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**

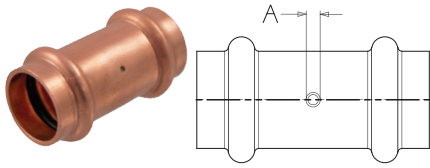


**PC617**  
Cap P – Wrot

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

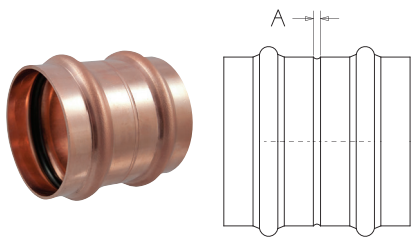
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**COUPLINGS**



PC600-DS  
Coupling P x P – Wrot

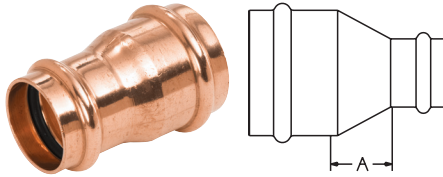
NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
1/2	.083	3/16
3/4	.157	5/32
1	.198	5/32
1¼	.271	5/32
1½	.530	3/16
2	.691	5/32
2½	.669	1/8
3	.979	1/8
4	2.134	7/32



PC600-RS  
Coupling P x P – Wrot

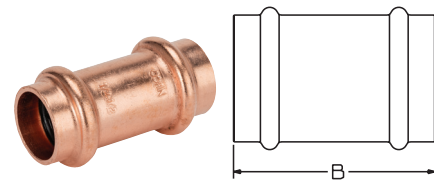
NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
2½	.688	1/8
3	.979	1/8
4	2.134	7/32

**COUPLINGS (Cont.)**



PC600-R  
Reducing Coupling P x P – Wrot

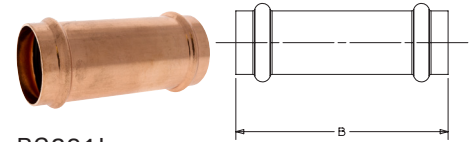
NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
3/4 x 1/2	.121	1/4
1 x 1/2	.139	7/16
1 x 3/4	.184	13/32
1¼ x 3/4	.245	1/2
1¼ x 1	.231	7/16
1½ x 3/4	.382	15/32
1½ x 1	.370	13/32
1½ x 1¼	.399	9/32
2 x 3/4	.516	29/32
2 x 1	.552	11/16
2 x 1¼	.570	11/16
2 x 1½	.662	7/16
2½ x 1	.620	31/32
2½ x 1¼	.644	1
2½ x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



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

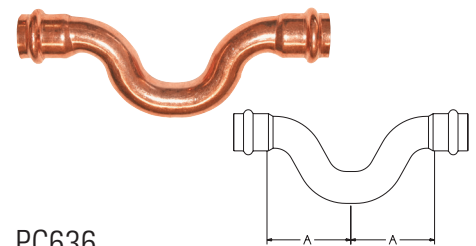
NOM. SIZE	APPROX. NET WT./LBS.	DIM. B INCHES
1/2	.082	1 3/4
3/4	.157	2 1/4
1	.190	2 1/4
1¼	.271	2 15/32
1½	.511	3 11/32
2	.691	3 5/8
2½	.669	2 15/16
3	.979	3 5/16
4	1.878	4 5/16

**COUPLINGS (Cont.)**



PC601L  
Extended Repair Coupling P x P

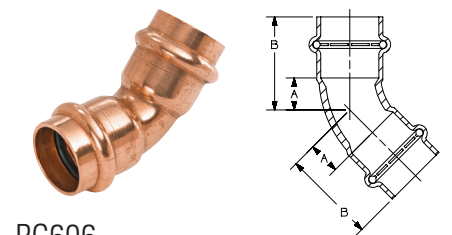
NOM. SIZE	APPROX. NET WT./LBS.	DIM. B INCHES
1/2	0.1250	2 29/32
3/4	0.2200	3 9/32
1	0.3050	3 21/32
1¼	0.4090	4 1/16
1½	0.7150	4 21/32
2	1.0230	5 1/4



PC636  
Crossover Coupling P x P – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
1/2	.196	1 1/2
3/4	.430	2 5/16

**ELBOWS**

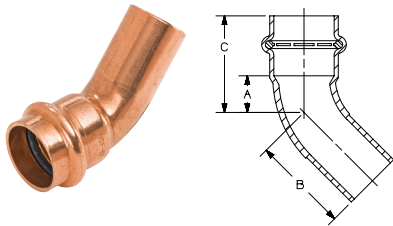


PC606  
45° Elbow P x P – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
1/2	.092	13/32	1 1/8
3/4	.181	1/2	1 13/32
1	.251	5/8	1 1/2
1¼	.403	25/32	1 25/32
1½	.666	15/16	2 5/16
2	1.063	1 3/16	2 23/32
2½	1.041	7/8	2 3/8
3	1.536	1 1/8	2 25/32
4	3.375	1 11/16	3 27/32

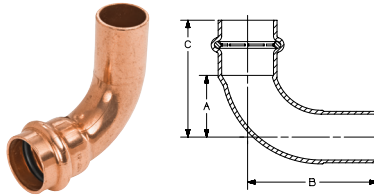
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**ELBOWS (Cont.)**



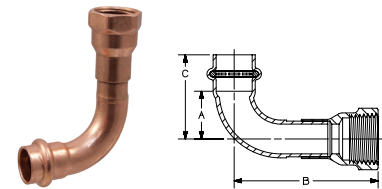
**PC606-2**  
45° Elbow Ftg x P – Wrot

NOM. SIZE	APPROX. NET WT. LBS.	DIMENSIONS INCHES		
		A	B	C
1/2	.094	7/16	1 5/16	1 1/8
3/4	.171	17/32	1 13/32	1 13/32
1	.248	9/16	1 17/32	1 7/16
1 1/4	.368	1 1/16	1 3/4	1 11/16
1 1/2	.673	1 13/16	2 5/16	2 3/16
2	1.057	1	2 21/32	2 1/2
2 1/2	1.050	2 9/32	2 3/16	2 3/8
3	1.526	1 5/32	2 19/32	2 13/16
4	3.284	1 17/32	3 3/32	3 11/16



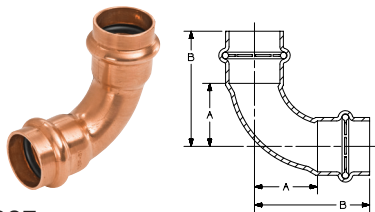
**PC607-2**  
90° Elbow Ftg x P – Wrot

NOM. SIZE	APPROX. NET WT. LBS.	DIMENSIONS INCHES		
		A	B	C
1/2	.110	25/32	1 21/32	1 15/32
3/4	.219	1 1/16	2 7/32	1 31/32
1	.328	1 13/32	2 5/8	1 1/2
1 1/4	.490	1 7/8	3 3/32	2 29/32
1 1/2	.871	2 7/32	3 15/16	3 11/16
2	1.474	2 29/32	4 17/32	4 15/32
2 1/2	1.356	1 19/32	3 7/32	3 1/16
3	2.065	2	3 13/16	3 21/32
4	3.920	2 15/32	4 3/4	4 5/8



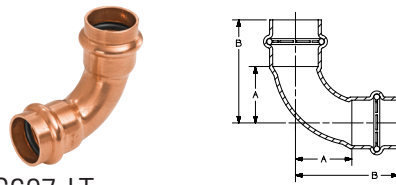
**PC607-3**  
90° Elbow P x F - Wrot

NOM. SIZE	APPROX. NET WT. LBS.	DIMENSIONS INCHES		
		A	B	C
1/2	.191	25/32	2 17/32	1 15/32
1/2 x 3/8	.154	25/16	2 7/32	1 15/32
1/2 x 3/4	.251	25/32	2 11/16	1 15/32
3/4	.361	1 1/16	3 1/8	2
3/4 x 1/2	.321	1 1/16	2 27/32	2
1	.513	1 1/16	3 15/32	2 5/16
1 1/4	.892	1 27/32	4 3/16	2 29/32
1 1/2	1.314	2 7/32	5 1/16	3 11/16
2	2.109	2 29/32	5 5/8	4 15/32



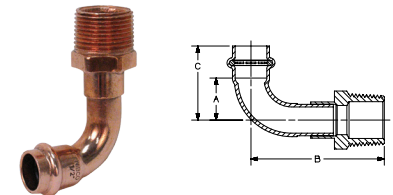
**PC607**  
90° Elbow P x P – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
3/4	.223	1 3/32	2
3/4 x 1/2	.201	1 5/32	2
1	.331	1 15/32	2 11/32
1 x 3/4	.321	1 5/16	2 5/16
1 1/4	.528	1 27/32	2 29/32
1 1/2	.895	2 7/32	3 21/32
2	1.480	2 15/16	4 15/32
2 1/2	1.224	1 5/8	3 3/32
3	1.900	2	3 21/32
4	3.935	2 15/32	4 5/8



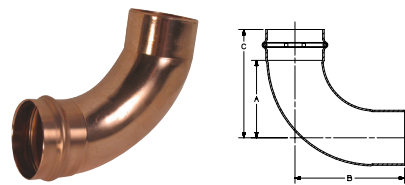
**PC607-LT**  
90° Long Radius Elbow  
P x P – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES	DIM. B INCHES
3	2.810	4 1/32	5 11/16
4	5.696	5 1/4	7 13/32



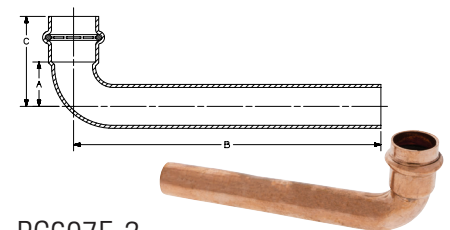
**PC607-4**  
90° Elbow P x M - Wrot

NOM. SIZE	APPROX. NET WT. LBS.	DIMENSIONS INCHES		
		A	B	C
1/2	.183	25/32	2 9/32	1 15/32
1/2 x 3/4	.340	25/32	2 21/32	1 15/32
3/4	.349	1 1/16	3 1/32	2
3/4 x 1/2	.340	1 1/16	3 1/16	2
1	.521	1 7/16	3 13/32	2 5/16
1 1/4	.926	1 27/32	4 1/32	2 29/32
1 1/2	1.443	2 7/32	5 15/16	3 11/16
2	2.205	2 29/32	5 5/8	4 15/32



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

NOM. SIZE	APPROX. NET WT. LBS.	DIMENSIONS INCHES		
		A	B	C
2 1/2	2.114	3 11/16	5 7/32	5 5/32
3	3.037	4 1/32	5 3/4	5 11/16

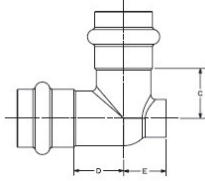


**PC607E-2**  
Extended Elbow P x FTG – Wrot

NOM. SIZE	APPROX. NET WT. LBS.	DIMENSIONS INCHES		
		A	B	C
3/4	.407	29/32	6 1/8	1 25/32

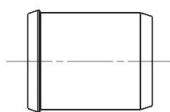
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**ELBOWS (Cont.)**



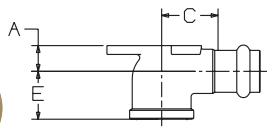
PC705-D  
Vent Elbow P x P – Forged Brass

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



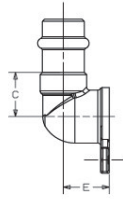
PC605  
Stiffener – Wrot

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.	DIMENSIONS INCHES		
		A	C	E
1/2	.252	17/32	7/8	27/32
3/4	.588	23/32	15/8	31/32

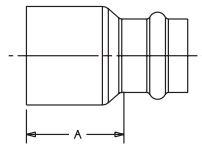


PC707-3-5-A  
Hi-Ear Elbow P x F – Cast \*Lead Free

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

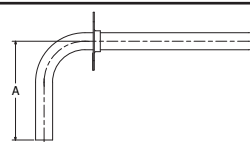
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**FITTING REDUCERS**



PC600-2  
Fitting Reducer Ftg x P – Wrot

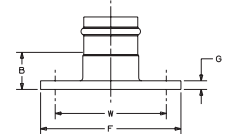
NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
1/2	.610	21/32
3/4 x 1/2	.092	17/16
3/4	.126	31/32
1 x 1/2	.123	17/16
1 x 3/4	.151	113/32
1	.162	11/8
1 1/4 x 1/2	.155	119/32
1 1/4 x 3/4	.175	113/32
1 1/4 x 1	.181	17/16
1 1/4	.215	13/16
1 1/2 x 1/2	.243	23/32
1 1/2 x 3/4	.248	131/32
1 1/2 x 1	.251	113/16
1 1/2 x 1 1/4	.251	125/32
1 1/2	.382	15/16
2 x 1/2	.394	21/2
2 x 3/4	.405	211/32
2 x 1	.398	27/32
2 x 1 1/4	.420	23/32
2 x 1 1/2	.507	131/32
2	.619	19/16
2 1/2 x 3/4	.540	21/2
2 1/2 x 1	.707	21/2
2 1/2 x 1 1/4	.776	29/16
2 1/2 x 1 1/2	.840	213/32
2 1/2 x 2	.839	2
3 x 3/4	.755	229/32
3 x 1 1/4	.882	213/16
3 x 1 1/2	1.055	213/16
3 x 2	1.084	23/8
3 x 2 1/2	.820	21/4
4 x 3/4	1.723	43/32
4 x 2	1.832	35/8
4 x 2 1/2	1.837	31/32
4 x 3	2.013	31/32



PC607-2EW Stub-Out F x S

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

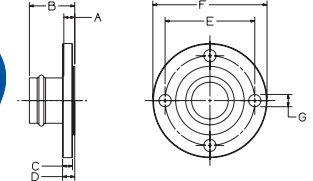
**FLANGES**



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

NOM. SIZE	APPROX. NET WT. LBS.	DIMENSIONS INCHES			
		B	F	G	W
1	1.428	1 1/4	4 1/4	1/4	3 1/8
1 1/4	1.632	1 5/16	4 5/8	1/4	3 1/2
1 1/2	2.186	1 7/16	5	5/16	3 7/8
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  
Companion Flange  
P x Flange - Wrot

NOM. SIZE	APPROX. NET WT. LBS.	DIMENSIONS INCHES		
		A	B	C
3/4	1.518	21/32	217/32	7/16
1	2.013	123/32	219/32	1/2
1 1/4	2.623	21/32	221/32	9/16
1 1/2	3.342	1 1/2	27/8	5/8
2	4.884	1 15/32	211/32	5/8
2 1/2	6.418	3/4	225/32	5/8
3	7.409	15/32	215/16	21/32
4	10.920	21/32	33/8	23/32

NOM. SIZE	DIMENSIONS INCHES		
	D	E	F
3/4	9/16	23/4	37/8
1	5/8	31/8	41/4
1 1/4	11/16	31/2	45/8
1 1/2	25/32	37/8	5
2	25/32	43/4	6
2 1/2	3/4	51/2	7
3	13/16	6	7 1/2
4	1	7 1/2	9

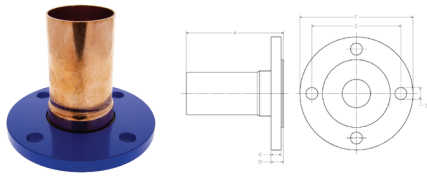
**NOTE:** 4" requires (8) "G" holes equally spaced.  
**NOTE:** Mates with ANSI Class 125/150 flanges.

**⚠ 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](http://www.P65Warnings.ca.gov).

LEAD-FREE: Weighted average lead content ≤ 0.25%

Visit our website for the most current information.

**FLANGES (Cont.)**

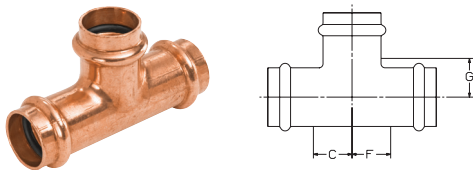


PC672-2 Companion Flange  
FTG x Flange – Wrot

NOM. SIZE	APPROX. NET WT. LBS.	A	DIMENSIONS INCHES C D	
2	5.46	6	5/8	25/32
2½	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	DIMENSIONS INCHES E F G		
2	4 ¾	6	¾
2½	5 ½	7	¾
3	6	7 ½	¾
4	7 ½	9	¾

**TEES**



PC611 Tee P x P x P – Wrot

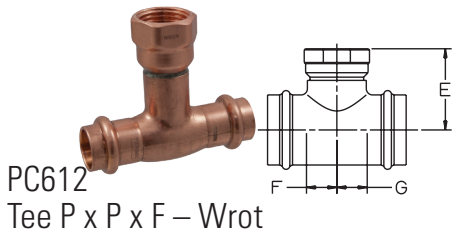
NOM. SIZE	APPROX. NET WT. LBS.	C	F	G
1/2	.176	23/32	23/32	15/32
1/2 x 1/2 x 3/4	.314	21/16	21/16	15/16
1/2 x 1/2 x 1	.491	17/32	17/32	7/8
3/4	.320	25/32	25/32	21/32
3/4 x 1/2 x 1/2	.281	5/8	29/32	21/32
3/4 x 1/2 x 3/4	.320	21/32	11/16	11/16
3/4 x 3/4 x 1/2	.276	21/32	21/32	21/32
3/4 x 3/4 x 1	.461	11/32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

**TEES (Cont.)**

NOM. SIZE	APPROX. NET WT. LBS.	DIMENSIONS INCHES C F G		
1 x 3/4 x 1	.578	13/16	11/16	7/8
1 x 1 x 1/2	.324	21/32	21/32	7/8
1 x 1 x 3/4	.388	¾	¾	27/32
1 x 1 x 1¼	.723	11/8	11/8	7/8
1¼	.759	1	1	15/16
1¼ x 1/2 x 1¼	.690	31/32	17/32	31/32
1¼ x 1 x 1/2	.674	31/32	15/32	15/8
1¼ x 3/4 x 1/2	.682	15/16	19/32	15/8
1¼ x 3/4 x 3/4	.565	¾	17/32	11/32
1¼ x 3/4 x 1	.709	31/32	11/4	15/16
1¼ x 3/4 x 1¼	.698	31/32	19/32	15/16
1¼ x 1 x 3/4	.753	27/32	13/16	113/32
1¼ x 1 x 1	.725	31/32	17/32	19/32
1¼ x 1¼ x 1/2	.408	1	1	117/32
1¼ x 1¼ x 3/4	.589	23/32	23/32	15/16
1¼ x 1¼ x 1	.508	7/8	7/8	31/32
1½	1.179	15/16	15/16	13/32
1½ x 1/2 x 1½	1.263	29/32	29/32	1
1½ x 3/4 x 3/4	1.101	29/32	13/16	13/4
1½ x 1 x 3/4	1.217	15/16	13/4	113/16
1½ x 1 x 1	1.105	13/16	11/16	119/32
1½ x 1 x 1½	1.146	27/32	121/32	11/8
1½ x 1¼ x 3/4	1.164	31/32	15/8	17/8
1½ x 1¼ x 1	1.105	7/8	119/32	15/8
1½ x 1¼ x 1¼	1.160	15/16	19/16	119/32
1½ x 1½ x 1/2	.639	3/8	3/8	11/8
1½ x 1½ x 3/4	.740	19/32	19/32	13/32
1½ x 1½ x 1	.785	11/16	11/16	13/16
1½ x 1½ x 1¼	1.262	7/8	7/8	119/32
2	1.771	113/32	113/32	113/32
2 x 1/2 x 2	1.663	113/32	21/2	17/16
2 x 1 x 1	1.764	113/32	21/4	27/32
2 x 1 x 2	1.564	113/32	25/32	113/32
2 x 1¼ x 1¼	1.471	111/32	21/16	21/8
2 x 1½ x 3/4	1.542	111/32	29/32	21/4
2 x 1½ x 1	1.546	13/8	29/32	21/4
2 x 1½ x 1¼	1.543	13/8	29/32	25/32
2 x 1½ x 1½	1.670	11/8	19/16	113/32
2 x 1½ x 2	1.787	15/32	111/16	11/2
2 x 2 x 1/2	1.576	13/8	13/8	27/16
2 x 2 x 3/4	1.256	¾	¾	11/2
2 x 2 x 1	1.530	29/32	29/32	111/16
2 x 2 x 1¼	1.576	13/8	13/8	21/8
2 x 2 x 1½	1.770	11/8	11/8	11/2
2 1/2	2.082	19/16	19/16	17/8
2½ x 3/4 x 2½	2.294	121/32	27/8	113/16
2½ x 1 x 2½	2.004	11/2	21/2	125/32
2½ x 1¼ x 2½	2.081	121/32	217/32	113/16
2½ x 1½ x 2½	2.973	125/32	27/16	17/8
2½ x 1½ x 2	3.052	115/16	27/16	23/8

NOM. SIZE	APPROX. NET WT. LBS.	C	F	G
2½ x 2 x 3/4	2.934	113/16	131/32	215/16
2½ x 2 x 1	2.907	127/32	21/32	23/4
2½ x 2 x 1¼	2.954	111/16	2	219/32
2½ x 2 x 1½	2.976	123/32	2	215/32
2½ x 2 x 2	3.046	113/16	131/32	21/4
2½ x 2 x 3	3.580	217/32	23/4	23/8
2½ x 2 x 2½	2.150	113/16	131/32	17/8
2½ x 2½ x 1/2	2.117	121/32	121/32	31/4
2½ x 2½ x 3/4	2.011	19/16	19/16	215/16
2½ x 2½ x 1	2.010	111/16	111/16	23/4
2½ x 2½ x 1¼	2.075	121/32	121/32	221/32
2½ x 2½ x 1½	2.966	127/32	127/32	21/2
2½ x 2½ x 2	2.957	125/32	125/32	21/4
3	3.122	115/16	115/16	21/32
3 x 3/4 x 3	3.049	17/8	31/2	23/16
3 x 1 x 3	3.043	17/8	33/16	23/16
3 x 1¼ x 3	2.986	17/8	215/16	21/8
3 x 1½ x 3	3.811	21/32	225/32	213/32
3 x 2 x 2	3.829	131/32	211/32	23/4
3 x 2 x 2½	3.761	21/32	221/32	21/2
3 x 2 x 3	3.866	2	221/32	23/8
3 x 2½ x 2	3.081	17/8	27/16	213/16
3 x 2½ x 2½	3.010	113/16	215/32	21/2
3 x 2½ x 3	3.194	113/16	215/32	23/16
3 x 3 x 1/2	2.945	17/8	17/8	317/32
3 x 3 x 3/4	2.941	17/8	17/8	31/2
3 x 3 x 1	2.987	17/8	17/8	35/16
3 x 3 x 1¼	2.957	17/8	17/8	215/16
3 x 3 x 1½	3.056	17/8	17/8	213/16
3 x 3 x 2	3.145	17/8	17/8	211/16
3 x 3 x 2½	3.034	115/16	115/16	21/2
4	7.169	213/32	213/32	217/32
4 x 2 x 4	7.069	23/8	319/32	219/32
4 x 2½ x 4	6.984	23/8	325/32	223/32
4 x 3 x 2	6.965	23/8	39/16	325/32
4 x 3 x 2½	6.990	23/8	39/16	329/32
4 x 3 x 3	7.085	23/8	39/16	31/2
4 x 3 x 4	6.993	23/8	323/32	223/32
4 x 4 x 1/2	4.328	111/32	111/32	311/32
4 x 4 x 3/4	4.415	111/32	111/32	35/16
4 x 4 x 1	4.414	111/32	111/32	31/8
4 x 4 x 1¼	4.730	17/16	17/16	33/32
4 x 4 x 1½	7.144	211/32	211/32	331/32
4 x 4 x 2	7.094	211/32	211/32	313/16
4 x 4 x 2½	6.925	23/8	23/8	329/32
4 x 4 x 3	7.083	23/8	23/8	31/2

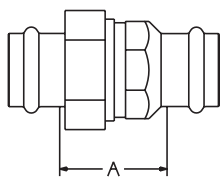
**TEES (Cont.)**



PC612  
Tee P x P x F – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIMENSIONS INCHES		
		E	F	G
1/2	.257	1 <sup>31</sup> / <sub>32</sub>	2 <sup>3</sup> / <sub>32</sub>	2 <sup>3</sup> / <sub>32</sub>
3/4	.434	2 <sup>11</sup> / <sub>32</sub>	2 <sup>5</sup> / <sub>32</sub>	2 <sup>5</sup> / <sub>32</sub>
3/4 x 3/4 x 1/4	.385	2 <sup>3</sup> / <sub>32</sub>	2 <sup>3</sup> / <sub>32</sub>	2 <sup>1</sup> / <sub>32</sub>
3/4 x 3/4 x 1/2	.258	2 <sup>5</sup> / <sub>32</sub>	2 <sup>1</sup> / <sub>32</sub>	2 <sup>1</sup> / <sub>32</sub>
1 x 1 x 1/2	.393	2 <sup>1</sup> / <sub>4</sub>	2 <sup>1</sup> / <sub>32</sub>	2 <sup>1</sup> / <sub>32</sub>
1 x 1 x 3/4	.516	2 <sup>27</sup> / <sub>32</sub>	2 <sup>1</sup> / <sub>32</sub>	2 <sup>1</sup> / <sub>32</sub>
1 1/4 x 1 1/4 x 1/2	.494	2 <sup>13</sup> / <sub>32</sub>	5/8	5/8
1 1/4 x 1 1/4 x 3/4	.679	2 <sup>5</sup> / <sub>8</sub>	1 <sup>1</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>16</sub>
1 1/2 x 1 1/2 x 1/2	.733	2 <sup>11</sup> / <sub>16</sub>	3/8	3/8
1 1/2 x 1 1/2 x 3/4	.885	2 <sup>7</sup> / <sub>8</sub>	1 <sup>9</sup> / <sub>32</sub>	1 <sup>9</sup> / <sub>32</sub>
2 x 2 x 1/2	1.699	3 <sup>27</sup> / <sub>32</sub>	1 <sup>3</sup> / <sub>8</sub>	1 <sup>3</sup> / <sub>8</sub>
2 x 2 x 3/4	1.370	3 <sup>3</sup> / <sub>16</sub>	3/4	3/4
2 1/2 x 2 1/2 x 3/4	1.049	2 <sup>15</sup> / <sub>32</sub>	1 <sup>1</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>16</sub>
2 1/2 x 2 1/2 x 2	1.925	3 <sup>7</sup> / <sub>32</sub>	1 <sup>9</sup> / <sub>32</sub>	1 <sup>9</sup> / <sub>32</sub>
3 x 3 x 3/4	1.435	2 <sup>3</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>16</sub>
3 x 3 x 2	2.097	3 <sup>15</sup> / <sub>32</sub>	2 <sup>1</sup> / <sub>32</sub>	2 <sup>1</sup> / <sub>32</sub>
4 x 4 x 3/4	2.786	3 <sup>1</sup> / <sub>4</sub>	1 <sup>1</sup> / <sub>16</sub>	1 <sup>1</sup> / <sub>16</sub>
4 x 4 x 2	3.675	4	1 <sup>9</sup> / <sub>32</sub>	1 <sup>9</sup> / <sub>32</sub>

**UNIONS**



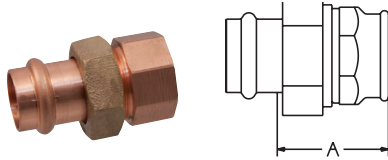
PC633  
Union P x P – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
1/2	.383	1 <sup>5</sup> / <sub>16</sub>
3/4	.527	1 <sup>9</sup> / <sub>32</sub>
1	.804	1 <sup>11</sup> / <sub>32</sub>
1 1/4	1.107	1 <sup>19</sup> / <sub>32</sub>
1 1/2	1.703	1 <sup>21</sup> / <sub>32</sub>
2	2.368	1 <sup>27</sup> / <sub>32</sub>

**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](http://www.P65Warnings.ca.gov).

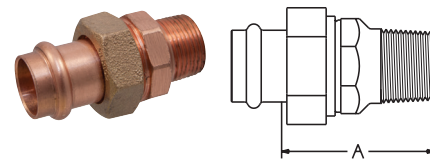
LEAD-FREE: Weighted average lead content ≤ 0.25%

**UNIONS (Cont.)**



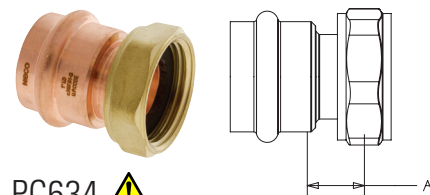
PC633-3 ⚠️  
Union P x F – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
1/2	.374	1 <sup>7</sup> / <sub>16</sub>
3/4	.527	1 <sup>7</sup> / <sub>32</sub>
1	.841	1 <sup>5</sup> / <sub>8</sub>
1 1/4	1.178	1 <sup>15</sup> / <sub>16</sub>
1 1/2	1.610	1 <sup>29</sup> / <sub>32</sub>
2	2.445	2 <sup>5</sup> / <sub>32</sub>



PC633-4 ⚠️  
Union P x M – Wrot

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
1/2	.386	1 <sup>13</sup> / <sub>16</sub>
3/4	.567	1 <sup>29</sup> / <sub>32</sub>
1	.842	2 <sup>5</sup> / <sub>32</sub>
1 1/4	1.316	2 <sup>3</sup> / <sub>8</sub>
1 1/2	1.756	2 <sup>13</sup> / <sub>32</sub>
2	2.789	2 <sup>3</sup> / <sub>4</sub>



PC634 ⚠️  
Tailpiece P x F BSP

NOM. SIZE	APPROX. NET WT./LBS.	DIM. A INCHES
1/2 X 1	0.1840	1 <sup>5</sup> / <sub>32</sub>
3/4 X 1	0.2230	1 <sup>5</sup> / <sub>32</sub>
1 X 1	0.2320	2 <sup>1</sup> / <sub>32</sub>
1 X 1 1/4	0.3530	3/8

**ACCESSORIES**



EPDM Seal (leak detection)

SIZE	PART No.	
1/2	T048352 PP	Leak Detect
3/4	T048354 PP	Leak Detect
1	T048356 PP	Leak Detect
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

SIZE	PART No.
1 1/2 - 2	K700001PC

Visit our website for the most current information.