

# Viega ProPress and ProPressG Systems Pocket Guide



The global leader  
in plumbing, heating  
and pipe joining systems

**viega**

# ProPress and ProPressG Systems

Welcome to Viega...

The global leader in plumbing, heating and pipe joining systems.



## **A heritage of better ideas since 1899**

When Franz-Anselm Viegner introduced a new brass beer tap in 1899, it became the first of over 16,000 Viega products that would follow. Many of these new ideas revolutionized the plumbing and heating industry, saving installation time, improving the environment and enhancing safety on the job.

Today, as we extend our global reach, the values of our founding generations still drive the family business: courage to explore new ideas; insistence on the highest standards of quality and commitment to exceed our customers' expectations.

## **Unrelenting dedication to quality**

Viega engineers take on challenges of all sizes, designing plumbing, heating and pipe joining systems that meet or exceed the strictest standards around the globe. We not only invent the most innovative products and systems; we also make sure they perform to higher quality standards than any imitators.

Our Quality Assurance, Research and Development departments test all Viega products and Viega-designed systems to ensure that every one performs to our customers' expectations. Other products may look similar, but none measure up to Viega standards for quality, performance and durability.

Table of contents

**Introduction**

Security under pressure . . . . . 4

System data sheet . . . . . 6

Product instructions . . . . . 7

Friction loss allowances . . . . . 9

Minimum clearance between Viega press connections . . . . . 11

Approved applications . . . . . 13

Sealing element descriptions . . . . . 14

FAQs . . . . . 15

**ProPress**

1/2" to 2" dimensional documentation . . . . . 17

**ProPress XL-C (Copper)**

2-1/2" to 4" dimensional documentation . . . . . 35

**ProPress XL (Bronze)**

2-1/2" to 4" dimensional documentation . . . . . 41

**ProPressG**

1/2" to 2" dimensional documentation . . . . . 45

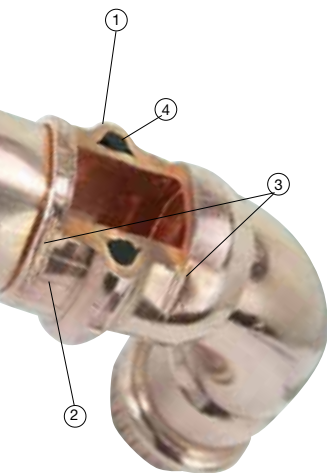
**Valves**

Dimensional documentation . . . . . 51

**Warranty**

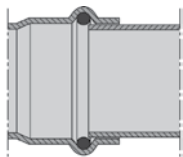
Viega limited warranty (covers ProPress fittings) . . . . . 55

Safe, certain and secure, Viega fittings are designed for peace of mind

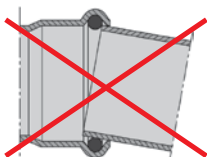


At Viega, safety is priority.

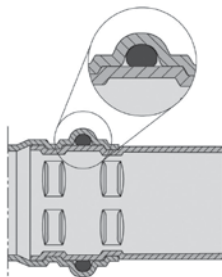
- 1** Viega's unique, patented Smart Connect feature helps installers ensure that they have pressed all connections.
- 2** Viega fittings offer cylindrical pipe guides which help installers ensure that the fitting is correctly inserted on the pipe.
- 3** Viega's distinctive hexagonal pressing pattern bonds fitting and pipe and provides the mechanical strength for the connection.
- 4** Viega offers three different sealing elements to suit virtually any application: EPDM, HNBR and FKM.



All Viega ProPress fittings are designed with cylindrical pipe guides (2) to keep the pipe straight and protect the sealing element during assembly.



Fittings that do not have cylindrical pipe guides risk making an unsecure connection. Without the pipe guides, installers can possibly damage the sealing element.



Viega fittings are pressed before, after and on top of the sealing element (3) in a single step which creates a permanent connection that is secure and guaranteed to last.



## Security under pressure

When pressure testing a system after all fittings have been installed, Viega recommends a step test to ensure that all connections have been pressed. Testing the system at full pressure initially may dislodge the sealing elements and result in a false positive reading. By testing at a lower pressure first, Viega's patented Smart Connect feature will identify which fittings have been

missed. Viega recommends the Smart Connect feature be tested at 15 to 85 psi when testing with water or 1/2 to 85 psi when testing with air. After ensuring that all connections have been correctly pressed, installers may increase the pressure test to full system test requirement.



System data sheet

System Description

ProPress®, ProPress XL™ and ProPress XLC are safe, reliable, and economical copper pipe installation systems that use modern cold press connection technology for a wide assortment of more than 500 fittings in dimensions ranging from 1/2" to 4".

Tubing: K, L, and M hard copper tubing from 1/2" to 4" and soft copper tubing in 1/2" to 1-1/4" diameters.

Applications

All tubing must comply with the ASTM B88 standard. ProPress 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.

Operating Parameters:

Operating Pressure 200 PSI Max.  
Test Pressure 600 PSI Max.  
Low Pressure Steam 15 PSI Max.  
Vacuum 29.2" Mercury Max. @ 68°F  
Operating Temperature 0°F - 250°F

Approved Applications:

- Potable water • Hydronic heating (w/ Glycol)
- Chilled water • Compressed Air (200 PSI Max.)
- Non Medical Gases (140 PSI Max.)
- Fire Sprinkler (175 PSI Max.)
- Low Pressure Steam (15 PSI Max.)
- Vacuum (29.2" Mercury Max. @ 68°F)

System Benefits

- Fast and Easy to Use • Flameless
- Permanent Connections • Wide Capacity from 1/2" to 4"
- Large Selection of Fittings
- Consistent Professional Appearance
- Less Equipment Required
- Environmentally Friendly Connection System
- Versatility of Fittings and Tools for Variety of Applications

Fittings

Viega ProPress fittings are offered in 500+ configurations including: Elbows, Couplings, Reducers, Tees, Reducing Tees, Threaded Adapters, Unions, Caps, and Flanges. All threaded 1/2" - 2" fittings are bronze. ProPress and ProPress XLC fittings conform to California AB 1953, Vermont 193 and NSF 61 Annex G.

Smart Connect® Feature

In ProPress 1/2" - 4" dimensions, the Smart Connect feature assures leakage of liquids and/or gases from inside the system past the sealing element of an unpressed connection. The function of this feature is to provide the installer quick and easy identification of connections which have not been pressed prior to putting the system into operation.

RIDGID Pressing Tools			
Model	330C	330B	210B
Volts	120v	14.4v Battery	18v Battery
Amps	5.2A	27.2A	24A
Weight (w/out jaw)	9 lbs.	10 lbs.	6.4 lbs.

Tools

RIDGID offers three pressing tools for connecting ProPress fittings.

- 330-C Corded Tool (1/2" to 4")
- 330-B Battery powered Tool (1/2" to 4")
- 210-B Battery powered Tool (1/2" to 1-1/4")
- 1/2" to 4" fittings are pressed in 4-7 sec.

History

ProPress has been used in Europe since the late 1980s and in the U.S. since the late 1990s for a variety of applications. Backed by two plumbing leaders with over 175 years of combined excellence.

Warranty

Viega ProPress products carry a 50-year warranty against defects in material and workmanship. The RIDGID Lifetime Warranty applies to tools, jaws and crimp rings from Ridge Tool Company.

Approvals and Certificates

NSF International

[www.nsf.org/business/search\\_listings/index.asp?mname=enter "Viega"](http://www.nsf.org/business/search_listings/index.asp?mname=enter+Viega)

IAPMO

<http://pld.iapmo.org/> (enter "Viega")

UL

<http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/gfilenbr.html> (enter "ex6157")

ABS

(American Bureau of Shipping)  
<http://www.eagle.org> (enter "Viega")

CSA International

<http://www.csa-international.org/product/> (enter "Viega")

FM

INTERNATIONAL APPROVALS

- Deutsch Verein des Gas-und Wasserfachese.V. (DVGW)
- Lloyd's Register (LLOYD'S) • Det Norske Veritas (DNV)
- Registro Italiano Navale (RINA) • Bureau Veritas (BV)
- KIWA

Compliant with

- ICC International Plumbing Code
- UPC Uniform Plumbing Code
- PHCC National standard plumbing code
- Florida Building Code, Volume I/Plumbing Code
- NFPA 13, 13D, and 13R

Contact your local Viega or RIDGID representative for details on local approvals

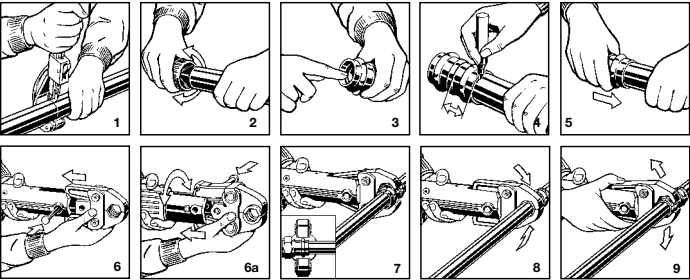
For more information on RIDGID products contact:

Ridge Tool Company  
400 Clark Street, Elyria, Ohio 44036  
Demos, Literature: 800-769-7743  
Technical inquiries: 800-519-3456  
Availability: 888-743-4333  
Web: [www.ridgid.com](http://www.ridgid.com)

Product Instructions

For Types K, L and M Hard Copper Tubing in 1/2" to 2" and Soft Copper Tubing in 1/2" to 1-1/4". This Product Contains Zero Lead.

**⚠ WARNING** Read and understand all instructions for installing ProPress fittings. Failure to follow all instructions may result in extensive property damage, serious injury or death.



ProPress Insertion Depth Chart						
Tube Size	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"
Insertion Depth	3/4"	7/8"	7/8"	1"	1-7/16"	1-9/16"

- 1. Cut copper tubing at right angles using displacement type cutter or fine-toothed steel saw.
- 2. Remove burr from inside and outside of tubing to prevent cutting sealing element.
- 3. Check seal for correct fit. Do not use oils or lubricants. Use only ProPress Shiny Black EPDM or Dull Black FKM Sealing Elements.
- 4. Mark proper insertion depth as indicated by the ProPress Insertion Depth Chart. Improper insertion depth may result in improper seal.
- 5. While turning slightly, slide press fitting onto tubing to the marked depth. **Note: End of tubing must contact stop.**
- 6. Insert appropriate Viega jaw into the pressing tool and push in holding pin until it locks in place.
- 7. Open the jaw and place at right angles on the fitting. Visually check insertion depth using mark on tubing.
- 8. Start pressing process and hold the trigger until the jaw has engaged the fitting.
- 9. After pressing, the jaw can be opened again.
- 10. For applications requiring ProPress with FKM sealing elements, remove the factory installed EPDM sealing element and replace with FKM sealing element.



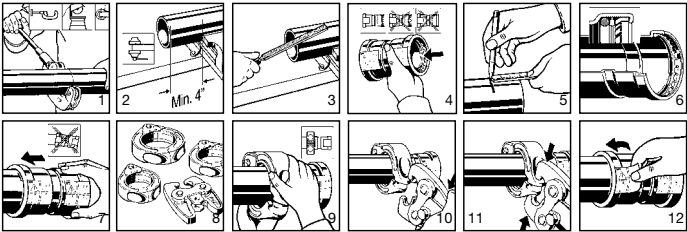
**Pressure Testing:** Pressure testing is to be carried out in accordance with local codes. ProPress includes the Smart Connect feature providing quick and easy identification of unpressed connections during the pressure testing process. **Unpressed connections are located by pressurizing the system with air or water. When testing with air the pressure range is 1/2 PSI to 85 PSI maximum. When testing with water the pressure range is 15 PSI to 85 PSI maximum.** The Smart Connect feature is an integral part of the design of the fitting assuring leakage of liquids and/or gases from inside the system past the sealing element of an unpressed connection. The Smart Connect feature is removed during the pressing process creating a leak-proof, permanent connection.

# ProPress XL-C (Copper) System

## Product Instructions

For Types K, L and M Hard Copper Tubing in 1/2" to 2" and Soft Copper Tubing in 1/2" to 1-1/4". This product contains Zero Lead.

**⚠ WARNING** Read, understand and follow all instructions for installing ProPress XL-C fittings. Failure to follow all instructions may result in extensive property damage, serious injury or death.



ProPress XL-C Insertion Depth Chart			
Tube Size	2-1/2"	3"	4"
Insertion Depth	1-5/8"	1-7/8"	2-3/8"

1. Cut copper tubing at right angles using displacement type cutter or fine-toothed steel saw.
2. Keep end of tubing a minimum of 4" away from the contact area of the vise to prevent possible damage to the tubing in the press area.
3. Remove burr from inside and outside of tubing to prevent cutting sealing element.
4. Check seal and grip ring for correct fit. Do not use oils or lubricants. Use only ProPress Shiny Black EPDM sealing elements.
5. Mark proper insertion depth as indicated by the ProPress XL-C Insertion Depth Chart. Improper insertion depth may result in an improper seal.
6. Illustration demonstrates proper fit of grip ring, separation ring and sealing element.
7. While turning slightly, slide press fitting onto tubing to the marked depth. End of tubing must contact stop.
8. ProPress XL-C fitting connections must be performed with ProPress XL-C Rings and V2 ACTUATOR. Use of ProPress XL Rings and/or Actuator (for Bronze fittings) will result in an improper connection. See Ridgid Operator's Manual for proper tool instructions.
9. Open XL-C Ring and place at right angles on the fitting. XL-C Ring must be engaged on the fitting bead. Check insertion depth.
10. With V2 ACTUATOR inserted into the tool, open the V2 ACTUATOR as shown and connect V2 ACTUATOR to the XL-C Ring.
11. Place V2 ACTUATOR onto XL-C Ring and start pressing process. Hold the trigger until the Actuator has engaged the XL-C Ring. Keep extremities and foreign objects away from XL-C Ring and V2 ACTUATOR during pressing operation to prevent injury or incomplete press.
12. Release V2 ACTUATOR from XL-C Ring and then remove the XL-C Ring from the fitting on completion of press. Remove tag from fitting indicating press has been performed.

**Pressure Testing:** Pressure testing is to be carried out in accordance with local codes. ProPress XL-C includes the Smart Connect feature providing quick and easy identification of **unpressed** connections during the pressure testing process. **Unpressed connections are located by pressurizing the system with air or water. When testing with air the pressure range is 1/2 PSI to 85 PSI maximum. When testing with water the pressure range is 15 PSI to 85 PSI maximum.** The Smart Connect feature is an integral part of the design of the fitting assuring leakage of liquids and/or gases from inside the system past the sealing element of an unpressed connection. The Smart Connect feature is removed during the pressing process creating a leak-proof, permanent connection.



# ProPress XL-C (Copper) System

## Friction loss allowances

Systems that use modern cold press connection technology for a wide assortment of more than 600 fittings in dimensions ranging from 1/2" to 4".

### Applications

Wrought — Copper Fittings						
Size	90° Elbow	45° Elbow	Tee Run	Outlet	90° Bend	180° Bend
1/2"	1/2	1/2	1/2	1	1/2	1
3/4"	1	1/2	1/2	2	1	2
1"	1	1	1/2	3	2	2
1-1/4"	2	1	1/2	4	2	3
1-1/2"	2	2	1	5	2	4
2"	2	2	1	7	3	8
2-1/2"	2	3	2	9	4	16
3"	3	4	—	—	5	20
4"						

Cast — Copper Alloy Fittings				
Size	90° Elbow	45° Elbow	Tee Run	Outlet
1/2"	1	1/2	1/2	2
3/4"	2	1	1/2	3
1"	4	2	1/2	5
1-1/4"	5	2	1	7
1-1/2"	8	3	1	9
2"	11	5	2	12
2-1/2"	14	8	2	16
3"	18	11	2	20
4				

Tubing: K, L and M hard copper tubing from 1/2" to 4" and soft copper tubing in 1/2" to 1-1/4" diameters. All tubing must comply with the ASTM B88 standard. ProPress 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.

### Operating parameters

- Operating Pressure 200 psi Max.
- Test Pressure 600 psi Max.
- Low Pressure Steam 15 psi Max.
- Vacuum 29.2" Mercury Max. @ 68°F
- Operating Temperature 0°F – 250°

### Tools

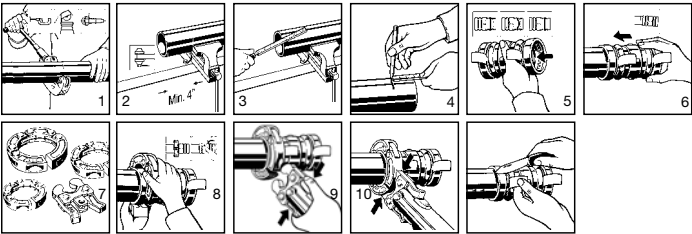
Viega recommends Ridgid press tools, ProPress jaws and ring sets manufactured and sold by Ridgid Tool Company for Viega systems.

# ProPress XL (Bronze) System

## Product Instructions

### Bronze Fittings for Types K, L and M Hard Copper Tubing in 2-1/2" to 4"

**⚠ WARNING** Read, understand and follow all instructions for installing ProPress XL fittings. Failure to follow all instructions may result in extensive property damage, serious injury or death.



ProPress XL Insertion Depth Chart			
Tube Size	2-1/2"	3"	4"
Insertion Depth	2-1/8"	2-1/8"	2-1/2"

1. Cut copper tubing at right angles using displacement type cutter or fine-toothed steel saw.
2. Keep end of tubing a minimum of 4" away from the contact area of the vise to prevent possible damage to the tubing in the press area.
3. Remove burr from inside and outside of tubing to prevent cutting sealing element.
4. Mark proper insertion depth as indicated by the ProPress XL insertion depth chart. Improper insertion depth may result in an improper seal.
5. Check seal and grip ring for correct fit.
6. While turning slightly, slide press fitting onto tubing to the marked depth. Do not use oils or lubricants.
7. ProPress XL fitting connections must be performed with ProPress XL Rings and Actuator. Use of other ring set or actuator will result in an improper connection. See Ridgid Operator's Manual for proper tool instructions.
8. Open XL Ring and place at right angle on the fitting. XL Ring must be engaged on the fitting bead. Check insertion depth.
9. With Actuator inserted into the tool, open the Actuator as shown.
10. Place Actuator onto XL Ring and start pressing process. Hold the trigger until the Actuator has engaged the XL Ring. Keep extremities and foreign objects away from XL Ring and Actuator during pressing operation to prevent injury or incomplete press.
11. Release Actuator from XL Ring and then remove the XL Ring from the fitting on completion of press. Remove tag from fitting indicating press has been performed.
12. For applications requiring ProPress XL with FKM sealing elements, remove the factory installed EPDM sealing element and replace with FKM sealing element.



**Pressure Testing:** Pressure testing is to be carried out in accordance with local codes. ProPress XL also includes the Smart Connect feature providing quick and easy identification of unpressed connections during the pressure testing process. Unpressed connections are located by pressurizing the system with air or water. When testing with air the pressure range is 1/2 PSI to 85 PSI Maximum. When testing with water the pressure range is 15 PSI to 85 PSI Maximum. The Smart Connect feature is an integral part of the design of the fitting assuring leakage of liquids and/or gases from inside the system past the sealing element of an unpressed connection. The Smart Connect feature is removed during the pressing process creating a leak-proof, permanent connection.

## ProPress XL (Bronze) System

### Minimum clearance between Viega press connections

ProPress — 1/2" to 2"	
Tubing Diameter	Minimum Clearance
1/2"	0"
3/4"	0"
1"	0"
1-1/4"	7/16"
1-1/2"	5/8"
2"	3/4"

ProPress XL Bronze — 2-1/2" to 4"	
Tubing Diameter	Minimum Clearance
2-1/2"	0"
3"	0"
4"	0"

ProPress XL-C Copper — 2-1/2" to 4"	
Tubing Diameter	Minimum Clearance
2-1/2"	5/8"
3"	5/8"
4"	5/8"

ProPress and ProPressG — 1/2" to 2"	
Tubing Diameter	Insertion Depth
1/2"	3/4"
3/4"	7/8"
1"	7/8"
1-1/4"	1"
1-1/2"	1-7/16"
2"	1-9/16"

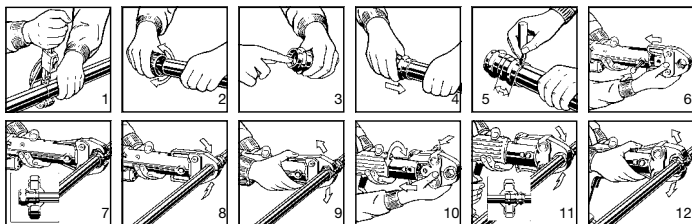
ProPress XL Bronze — 2-1/2" to 4"	
Tubing Diameter	Insertion Depth
2-1/2"	2-1/8"
3"	2-1/8"
4"	2-1/2"

ProPress XL-C Copper — 2-1/2" to 4"	
Tubing Diameter	Insertion Depth
2-1/2"	1-5/8"
3"	1-7/8"
4"	2-3/8"

## Product Instructions

### For Types K, L, and M Hard Copper Tubing in 1/2" to 2" and Soft Copper Tubing in 1/2" to 1-1/4".

**⚠ WARNING** Read and understand all instructions for installing ProPress G fittings for Fuel Gas. Failure to follow all instructions may result in extensive property damage, serious injury, or death.



1. Cut copper tubing at right angles (using displacement type cutter or fine-toothed steel saw).
2. Deburr tubing on inside and outside.
3. Check seal for correct fit. Do not use oils or lubricants. Use only ProPress Yellow HNBR sealing elements.
4. While turning slightly, slide press fitting onto tubing to the fitting stop. Note: End of tubing must stop.
5. Mark insertion depth.
6. Insert the appropriate jaw into the pressing tool and push in holding pin until it locks into place.
7. Open the jaw and place at right angles on the fitting. Visually check insertion depth using mark on tubing.
8. Start pressing process and hold the trigger until the jaw has engaged the fitting.
9. After pressing, the jaw can be opened again.
10. Battery-powered tool: Insert the appropriate jaw into the tool and secure with the holding pin. Rotate tool head into desired position.
11. Open the jaw and place on the press fitting at right angles. Check insertion depth, start pressing process and hold the trigger until the jaw has engaged the fitting.
12. On completion of the pressing process, the jaw can be opened again.

**⚠ WARNING** The following standards, codes and instructions should be followed when installing ProPressG fittings for Fuel Gas.

- The installation shall be made in accordance with local codes, or, in the absence of local codes, in accordance with the National Fuel Gas Code, NFPA 54, the LP- Gas Code NFPA 58, as applicable.
- For use with type K, L, or M copper tubing, drawn copper from 1/2" to 2", and annealed copper from 1/2" to 1-1/4". All copper must be in compliance with ASTM B-88.
- The fittings are for use with fuel gases only and are intended for operating pressure specified (Maximum 125 PSI).
- Undue stress or strain on the fittings and the tubing is to be avoided.
- Concealed tubing and fittings shall be protected from puncture threats.
- If the installation requires components in addition to those supplied by the fitting manufacturer, those components shall be specified. The instructions shall state that only the components provided or specified by the manufacturer are to be used in the installation.
- The fitting/tubing system shall not be used as a grounding electrode for an electrical system.
- The inspection, testing and purging of the installation shall be performed using procedures specified in Part 4 of the National Fuel Gas Code, ANSI Z223.1, the LP-Gas Code NFPA 58 section 3.2-10 as applicable, or in accordance with the requirements of the applicable local codes.
- For use with, natural, propane, mixed, and manufactured gases in the vapor state not in the liquid state.
- The fitting/tubing system shall not be used as a means of support.



**Pressure Testing:** Pressure testing is to be carried out in accordance with local codes. The Smart Connect feature is a special indentation on the inside surface of the fitting near the sealing element. This indentation assures identification of liquids and /or gases from inside the system past the sealing element of an unpressed connection. The indentation is removed during the pressing process creating a leak-proof, permanent connection. This feature provides quick and easy identification of connections which have not been pressed prior to putting the system into operation. Unpressed connections are located by pressurizing the tubing system with a maximum pressure range of 1/2-85 PSI leakage.

Approved applications

Types of Service	System Operating Conditions			ProPress	Pro-PressG	Specialty Seals Field Installed
	Comments	Pressure	Temperature	EPDM	HNBR	FKM
Fluids/Water						
Hot & Cold Potable Water	UPC and IMC regulate potable water temperature to 120°F for bathing purposes	200 PSI	32°F - 250°F	√		
Rainwater/ Greywater		200 PSI		√	√	√
Fire Sprinkler	Compliant with UL, FM with EPDM only	175 PSI		√		√
Chilled Water	Ethylene Glycol / Propylene Glycol	200 PSI	Down to -4°F	√	√	√
Hydronic Heating	Ethylene Glycol / Propylene Glycol	200 PSI	Up to 250°F	√		√
Low Pressure Steam		up to 15 PSI	248°F	√		√
Oil and Lubricant						
Heating Fuel Oil		125 PSI	-40°F - 180°F Ambient		√	
Diesel Fuel	Compliant with NFPA 30 and 30A	125 PSI			√	
Ethanol	pure grain alcohol			√		
Gases						
Compressed Air	less than 25mg/m <sup>3</sup> oil content	200 PSI		√	√	√
Compressed Air	more than 25mg/m <sup>3</sup> oil content	200 PSI			√	√
Natural Gas	Compliant with CSA LC4	125PSI	-40° - 180°F Ambient		√	
Liquid Propane Gas, Liquid Butane Gas	Compliant with CSA LC4	125PSI	-40° - 180°F Ambient		√	
Oxygen - O <sub>2</sub> (non medical)	keep oil and fat free / non liquid O <sub>2</sub>	140 PSI (200 PSI only HNBR)	up to 140°F	√	√	
Nitrogen - N <sub>2</sub>		200 PSI		√	√	
Carbon dioxide - CO <sub>2</sub>	dry	200 PSI		√	√	
Argon		200 PSI		√	√	
Corgon		200 PSI		√	√	
Hydrogen - H		125 PSI		√	√	
Vacuum		max. 29.2 inches of Mercury		√	√	√
<b>Notes: FKM sealing elements not compatible with XL-C fittings.</b>						
<b>1. All systems are recommended to be clearly labeled with the fluid or gas being conveyed. For further information please see the Viega technical bulletin TB-PIPELABELING.</b>						
<b>2. Consult the Viega Technical Support Department for information on applications not listed and applications outside the temperature and pressure ranges listed above.</b>						

## Sealing element descriptions

### EPDM Sealing Element

ProPress® / ProPress XL® press fittings are manufactured with a high quality EPDM sealing element installed at the factory. This sealing element is used mainly in the applications of potable water, hydronic heating, low-pressure steam, fire sprinkler, and compressed air installations.

**Definition:** EPDM

Ethylene-propylene-diene-monomer unvulcanized gloss black in color

**Maximum Pressure:** 200 PSI

**Operating temperature:**

0°F to 250°F

The EPDM sealing element is a synthetically manufactured and peroxidically cross-linked general purpose unvulcanized rubber with a wide range of applications. It possesses excellent resistance to aging, ozone, sunlight, weathering, environmental influences, alkalis and most alkaline solutions and chemicals used in a broad range of applications.

The EPDM sealing element has particularly good resistance to hot water making it ideal for seals and gaskets in heating systems, fittings, and household appliances (e.g. washing machines, pumps, dishwashers).

The EPDM sealing element is recommended for drinking water applications. It is not resistant against hydrocarbon solvent solutions, related oils, chlorinated hydrocarbons, turpentine, and gasoline.

### FKM Sealing Element

The EPDM sealing element installed at the factory can be removed from the ProPress® / ProPress XL® press fittings in the field and re-placed with the appropriate size FKM sealing element.

**Definition:** FKM

Fluoroelastomer flat black in color

**Maximum Pressure:** 200 PSI

**Operating temperature:**

0°F to 284°F  
(or higher, for brief periods)

FKM sealing elements are recommended for use in solar heating systems which may experience temperature spikes up to 356°F.

FKM is well known for its excellent resistance to petroleum products and solvents as well as excellent high temperature performance. The FKM sealing element is a specialty purpose rubber-sealing element typically installed where higher temperatures and pressures are required.

It possesses excellent resistance to aging, ozone, sunlight, weathering, environmental influences, oils, and petroleum-based additives. Its excellent resistance to high temperatures and petroleum based additives makes it ideal for seals and gaskets in solar, district heating, low pressure steam, and compressed air system fittings.

The FKM sealing element is not suitable for food contact applications and cannot be installed in drinking water applications, Natural Gas, LP Gas, Mixed Gases, or Fuel oil systems.

It is not resistant against polar solvents, amines, anhydrous ammonia, SKYDROL, hydrazine, and hot acids.

### HNBR Sealing Element

ProPressG® press fittings are manufactured with a high quality HNBR sealing element installed at the factory. This sealing element is used mainly for applications of natural, propane, mixed, and manufactured gases in the vapor state not in the liquid state. It is commonly used in Fuel oil heating systems.

**Definition:** HNBR

Hydrogenated Nitrile Butadiene Rubber yellow in color

**Maximum Pressure:** 125 PSI

**Ambient Operating temperature:**

-40°F to 180°F

HNBR is widely known for its physical strength and retention of properties after long-term exposure to heat, oil, and chemicals.

The unique properties attributed to HNBR have resulted in wide adoption of HNBR in automotive, industrial, and assorted performance-demanding applications (i.e. Engine seals, grommets, and gaskets; Fuel system seals and hoses; Transmission system bonded piston seals; Chevron seals, Oil field packers, and rotary shaft seals.)

With its excellent performance for the most demanding of applications HNBR is the ideal choice for applications needing excellent physical properties, as well as oil, heat, and/or chemical resistance. The HNBR sealing element is not suitable for food contact applications and cannot be installed in drinking water applications.

## Frequently Asked Questions

**Q** What does “Zero Lead” mean?

**A** “Zero Lead” identifies Viega products meeting the lead free requirements of California and Vermont law, effective January 1, 2010, as tested and listed against NSF- 61, Annex G

**Q** What does “Lead Free” mean?

**A** California AB 1953 defines “Lead Free” as materials containing not more than 0.2 percent lead when used with respect to solder and flux and not more than a weighted average of 0.25 percent when used with respect to the wetted surfaces of pipes and pipe fittings, plumbing fittings, and fixtures, providing a specified definition and formula for determining “weighted average.”

**Q** What is NSF 61 Annex G (NSF 61 G)?

**A** NSF 61 Annex G is an optional evaluation method for products that need to meet a 0.25% weighted average lead content standard. Certification of products to this annex shall be noted in the certification listing. Products must first comply with the full requirements of NSF/ANSI 61 in order to be deemed compliant to this section.

**Q** What is a wetted surface?

**A** “Wetted Surface”, refers to any and all parts of a valve or fitting that is directly in contact with potable water.

**Q** Are ProPress valves and fittings “Lead Free”?

**A** Yes. ProPress fittings and valves contain zero lead and are listed to NSF 61 Annex G.

**Q** What materials are used to produce ProPress fittings?

**A** ProPress copper fittings are constructed of: Copper UNS – C87710 Zero Lead Bronze Alloy UNS – C87700

**Q** What is the warranty for ProPress Zero Lead fittings?

**A** ProPress fittings carry a 50-year warranty against defects in material and workmanship from Viega.

**Q** What is the procedure for soldering near a ProPress connection?

**A** When soldering near a ProPress connection, you must remain at least three pipe diameters away from the connection. If three pipe diameters are not possible, the installer should take proper precautions to keep the ProPress connection cool while soldering. These include: Wrapping the connection with a cold wet rag Fabricating solder connections prior to installing the pressed fitting making sure the pipe has cooled before installing the fitting Applying “spray type” spot freezing product

**Q** How would an inspector know they are looking at a good connection?

**A** Good connections can be proven by performing a pressure test. This is the same procedure for solder connections.

**Q** What is the lubrication used on the sealing elements?

**A** The sealing elements are lubricated with an NSF-61 approved silicone oil. If it is necessary to lubricate the seals in the field, use water only. Do not use other lubricants, especially any petroleum-based lubricants, as petroleum and EPDM are incompatible.

**Q** How long will the EPDM seal last?

**A** When properly installed, the EPDM seal and connection will last as long as the copper pipe that joins it, 50 years. This is confirmed in NSF-61 test reports.

**Q** How do I fabricate a system in tight places when using ProPress?

**A** If necessary, pre-fabricate connections that are in tight places and then install.

**Q** What is the warranty for ProPress?

**A** ProPress fittings carry a 50-year warranty against defects in material and workmanship from Viega. RIDGID Tools carry a lifetime warranty to be free from defects in workmanship and material.

**Q** Can you turn a pressed fitting without damaging the integrity of the connection?

**A** Yes. The fitting can be turned, although not by hand, and will not affect the integrity of the connection. As a general rule of thumb, if the fitting is turned more than 5° it must be repressed to restore the resistance to rotational movement.

Continued on next page.

## Frequently Asked Questions

Continued from previous page.

**Q** How do ProPress connections hold up to freezing temperatures?

**A** Copper water systems, both soldered and pressed, should not be allowed to freeze. When water freezes it expands and will damage the pipe or the system.

**Q** What level of turbulence occurs in ProPress fittings and will it cause premature wear in copper tubing?

**A** The long radius of ProPress elbows reduce the turbulence typically experienced with traditional short radius fittings. Not reaming the ID of the pipe is the largest contributing factor to turbulence and premature wear of any piping system.

**Q** Can a user solder the female "P" end of a ProPress fitting?

**A** This is not a recommended practice and constitutes improper use of the product voiding any product warranties. The recessed groove that normally houses the EPDM seal will interfere with the capillary action that normally draws solder into and around the tubing.

**Q** What are the flow rates through ProPress fittings?

**A** Because of the long radius, the flow rate is better than standard short radius solder fitting. Flow rates and flow rate calculations are the same as those used for solder fitting installations. The friction loss allowance table can be found in the ProPress Installation Manual.

**Q** Why use FKM or HNBR sealing elements for compressed air systems with more than 25 grams per cubic foot of oil content?

**A** FKM and HNBR sealing elements are better suited for high oil content due to their high resistance to hydrocarbon substances.

**Q** Can both ProPress and ProPressG fittings be used in the same installation?

**A** Yes. Both fittings can be used in the same installation as long as both fittings are approved for that particular application.

**Q** What should a user do if a ProPress system leaks?

**A** In general, ProPress fittings only leak due to one of three reasons; the fitting was never pressed, the copper tubing was not properly inserted or the pressing jaws were not properly aligned. If the fitting was never pressed, confirm that the tubing is properly installed and proceed with pressing. If the copper tubing was not properly inserted, cut out the fitting and reinstall properly. If the pressing jaws were not properly

aligned, cut out the fitting and reinstall properly. If problems persist, be sure to contact Viega immediately.

**Q** Is ProPress compatible with the cleaning agents used to disinfect a new plumbing system?

**A** Yes, however, it is recommended to contact your local District Manager or the Viega Technical Support Department for consultation.

**Q** What should be done if a user accidentally cuts the seal with the copper tubing?

**A** If the seal is damaged by inserting the copper tubing, the seal must be replaced. Please note that the tolerances of the fitting socket ensure that the tubing is inserted at the appropriate angle. If a chop saw is used to cut the tubing, debur the tubing before insertion into the fitting. This will prevent damage to the seal.

**Q** Is ProPress approved for underground use?

**A** Yes. ProPress can be installed underground, however, users must obtain approval from the authority having jurisdiction. Approval of this application is based upon performance testing conducted by NSF, which includes withstanding pressure, temperature, water hammer, bending forces, torsion, temperature variation, vibration and vacuum.

**Q** What is the Smart Connect feature?

**A** The Smart Connect feature provides a quick and easy way to identify unpressed connections during the pressure testing process. Unpressed connections are located by pressurizing the system with air or water. When testing with air, the pressure range is ½ psi to 85 psi maximum. When testing with water, the pressure range is 15 psi to 85 psi maximum. The Smart Connect feature is removed during the pressing process, creating a leak-proof, permanent connection. Guaranteed.

**Q** Why is the Smart Connect feature so valuable?

**A** The Smart Connect feature provides the user with a strong peace of mind. It allows for faster testing procedures since you do not have to shut down and drain the system. Costly damages and possible insurance claims and premiums can be avoided because it identifies unpressed connections before they can become a problem. Because of the time savings, projects stay on track.

**Q** If a leak is discovered, is it necessary to drain the system prior to pressing the connection?

**A** No. It is not necessary to drain the system when making a repair.



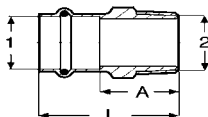
# ProPress

1/2" to 2" fittings

Dimensional documentation



## Dimensional documentation (inches)



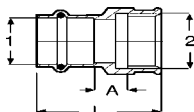
### Bronze Adapter P x MNPT Model 2911ZL

Stock Code	Size	A (in)	L (in)
	1 2		
79210	1/2" x 3/8" NPT	0.768	1.594
79215	1/2" x 1/2" NPT	1.024	1.929
79220	1/2" x 3/4" NPT	1.004	1.831
79225	3/4" x 1/2" NPT	1.024	1.929
79230	3/4" x 3/4" NPT	0.886	1.713
79235	3/4" x 1" NPT	1.181	2.087
79240	1" x 3/4" NPT	1.181	2.087
79245	1" x 1" NPT	1.260	2.165
79250	1" x 1-1/4" NPT	1.535	2.441
79255	1-1/4" x 1" NPT	1.220	2.244
79260	1 1/4" x 1-1/4" NPT	1.339	2.362
79265	1-1/4" x 1-1/2" NPT	1.476	2.500
79270	1-1/2" x 1-1/4" NPT	1.339	2.756
79275	1 1/2" x 1-1/2" NPT	1.339	2.756
79280	1-1/2" x 2" NPT	1.654	3.071
79285	2" x 1-1/2" NPT	1.535	3.110
79290	2" x 2" NPT	1.496	3.071

### Bronze Adapter P x MNPT Model 2911

Stock Code	Size	A (in)	L (in)
	1 2		
77812	1/2" x 3/8" NPT	0.96	1.713
77817	1/2" x 1/2" NPT	1.12	1.870
77822	1/2" x 3/4" NPT	1.22	1.969
77827	3/4" x 1/2" NPT	1.18	2.087
77832	3/4" x 3/4" NPT	1.18	2.087
22348	3/4" x 1" NPT	1.42	2.323
77837	1" x 3/4" NPT	1.32	2.224
77842	1" x 1" NPT	1.46	2.362
77847	1" x 1-1/4" NPT	1.73	2.638
77852	1-1/4" x 1" NPT	1.42	2.441
77857	1-1/4" x 1-1/4" NPT	1.54	2.559
77862	1-1/4" x 1-1/2" NPT	1.65	2.677
77867	1-1/2" x 1-1/4" NPT	1.54	2.953
77872	1-1/2" x 1-1/2" NPT	1.54	2.953
22343	1-1/2" x 2" NPT	1.83	3.248
22338	2" x 1-1/2" NPT	1.67	3.248
77877	2" x 2" NPT	1.67	3.248

## Dimensional documentation (inches)



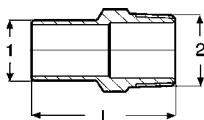
### Adapter P x FNPT Model 2912ZL

Stock Code	Size	A (in)	L (in)
	1 2		
79295	1/2" x 3/8" NPT	0.185	1.417
79300	1/2" x 1/2" NPT	0.252	1.614
79315	3/4" x 3/4" NPT	0.350	1.811
79310	3/4" x 1/2" NPT	0.331	1.772
79320	1" x 1/2" NPT	0.331	1.772
79325	1" x 3/4" NPT	0.390	1.850
79330	1" x 1" NPT	0.441	2.008
79335	1" x 1-1/4" NPT	0.500	2.087
79345	1-1/4" x 1" NPT	0.244	1.929
79350	1 1/4" x 1-1/4" NPT	0.343	2.047
79340	1-1/4" x 1/2" NPT	0.370	1.929
79360	1-1/2" x 1-1/4" NPT	0.264	2.362
79365	1 1/2" x 1-1/2" NPT	0.343	2.441
79370	2" x 2" NPT	0.406	2.677
79365	1-1/2" x 1-1/2" NPT	0.382	2.480
79370	2" x 2" NPT	0.445	2.717

### Bronze Adapter P x FNPT Model 2912

Stock Code	Size	A (in)	L (in)
	1 2		
77887	1/2" x 3/8" NPT	0.224	1.378
77892	1/2" x 1/2" NPT	0.291	1.575
77897	1/2" x 3/4" NPT	0.394	1.693
77902	3/4" x 1/2" NPT	0.331	1.772
77907	3/4" x 3/4" NPT	0.394	1.850
14548	1" x 1/2" NPT	0.252	1.693
77912	1" x 3/4" NPT	0.394	1.850
77917	1" x 1" NPT	0.480	2.047
77922	1" x 1-1/4" NPT	0.539	2.126
22208	1-1/4" x 1/2" NPT	0.374	1.929
77927	1-1/4" x 1" NPT	0.205	1.890
77932	1-1/4" x 1-1/4" NPT	0.382	2.087
77937	1-1/4" x 1-1/2" NPT	0.461	2.165
77942	1-1/2" x 1-1/4" NPT	0.382	2.480
77947	1-1/2" x 1-1/2" NPT	0.382	2.480
77952	2" x 2" NPT	0.445	2.717

## Dimensional documentation (inches)



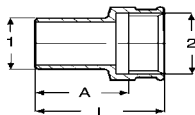
### Bronze Adapter FTG x MNPT Model 2911.1ZL

Stock Code	Size		L (in)
	1	2	
79375	1/2" x 3/8" NPT		1.752
79380	1/2" x 1/2" NPT		1.949
79385	1/2" x 3/4" NPT		2.047
79390	3/4" x 1/2" NPT		1.929
79395	3/4" x 3/4" NPT		2.047
79400	1" x 3/4" NPT		2.047
79405	1" x 1" NPT		2.224
79410	1-1/4" x 1-1/4" NPT		2.539
79415	1-1/2" x 1-1/2" NPT		2.894
79420	2" x 2" NPT		3.189

### Bronze Adapter FTG x MNPT Model 2911.1

Stock Code	Size		L (in)
	1	2	
77957	1/2" x 3/8" NPT		1.732
77962	1/2" x 1/2" NPT		1.969
77967	1/2" x 3/4" NPT		2.047
77972	3/4" x 1/2" NPT		2.028
77977	3/4" x 3/4" NPT		2.146
14553	1" x 3/4" NPT		2.146
77982	1" x 1" NPT		2.362
77987	1-1/4" x 1-1/4" NPT		2.657
77992	1-1/2" x 1-1/2" NPT		2.051
77997	2" x 2" NPT		3.543

## Dimensional documentation (inches)



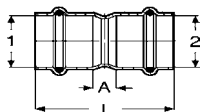
### Adapter FTG x FNPT Model 2912.1ZL

Stock Code	Size	A (in)	L (in)
	1 2		
79425	1/2" x 3/8" NPT	1.130	1.535
79430	1/2" x 1/2" NPT	1.217	1.752
79435	1/2" x 3/4" NPT	1.276	1.831
79440	3/4" x 1/2" NPT	1.256	1.791
79445	3/4" x 3/4" NPT	1.276	1.831
79455	1" x 1/2" NPT	1.453	1.988
79450	1" x 1" NPT	1.327	1.988
79460	1-1/4" x 1/2" NPT	1.650	2.185
79465	1-1/4" x 1-1/4" NPT	1.504	2.185
79470	1-1/2" x 1-1/2" NPT	1.878	2.559
79475	2" x 2" NPT	2.118	2.815

### Bronze Adapter FTG x FNPT Model 2912.1

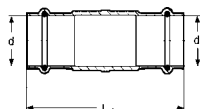
Stock Code	Size	A (in)	L (in)
	1 2		
78002	1/2" x 3/8" NPT	1.031	1.437
78007	1/2" x 1/2" NPT	1.118	1.654
78012	1/2" x 3/4" NPT	1.181	1.732
78017	3/4" x 1/2" NPT	1.217	1.752
78022	3/4" x 3/4" NPT	1.256	1.811
22218	1" x 1/2" NPT	1.433	1.969
22213	1-1/4" x 1/2" NPT	1.630	2.165
78027	1" x 1" NPT	1.307	1.969
78032	1-1/4" x 1-1/4" NPT	1.484	2.165
78037	1-1/2" x 1-1/2" NPT	1.878	2.559
78042	2" x 2" NPT	2.335	3.031

## Dimensional documentation (inches)



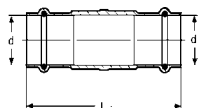
### Copper Coupling P x P with Stop Model 2915

Stock Code	Size	A (in)	L (in)
	1		
78047	1/2"	0.236	1.732
78052	3/4"	0.394	2.205
78057	1"	0.394	2.205
78062	1-1/4"	0.394	2.441
78067	1-1/2"	0.394	3.307
78072	2"	0.472	3.622



### Copper Coupling P x P No Stop Model 2915.3

Stock Code	Size	L (in)
	1	
78172	1/2"	1.732
78177	3/4"	2.205
78182	1"	2.205
78187	1-1/4"	2.441
78192	1-1/2"	3.307
78197	2"	3.622



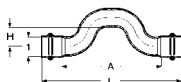
### Copper Coupling P x P Extended No Stop Model 2915.5

Stock Code	Size	L (in)
	1	
79005	1/2"	2.953
79010	3/4"	3.346
79015	1"	3.740
79020	1-1/4"	4.134
79025	1-1/2"	4.724
79030	2"	5.315

### Bronze Coupling P x P Extended No Stop Model 2915.6

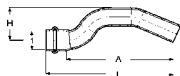
Stock Code	Size	L (in)
	1	
78213	1/2"	2.953
78218	3/4"	3.346
78223	1"	3.740
78228	1-1/4"	4.134
78233	1-1/2"	4.724
78238	2"	5.315

### Copper Cross-Over P x P Model 2928



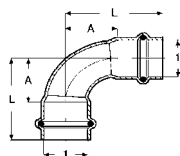
Stock Code	Size	A (in)	L (in)	H (in)
	1			
77742	1/2"	3.622	5.118	0.772
77747	3/4"	4.488	6.339	0.902

## Dimensional documentation (inches)



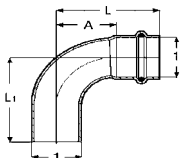
**Copper Cross-Over FTG x P Close Rough Model 2927**

Stock Code	Size	A (in)	L (in)	H (in)
	1			
78137	1/2"	3.835	4.583	1.098
78142	3/4"	4.638	5.543	1.539



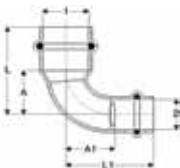
**Copper Elbow 90° P x P Close Rough Model 2916**

Stock Code	Size	A (in)	L (in)
	1		
77317	1/2"	0.748	1.496
77322	3/4"	1.039	1.945
77327	1"	1.323	2.228
77332	1-1/4"	1.654	2.677
77337	1-1/2"	1.984	3.402
77342	2"	2.551	4.126



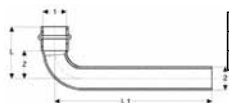
**Copper Elbow 90° FTG x P Close Rough Model 2916.1**

Stock Code	Size	A (in)	L (in)	L1 (in)
	1			
77347	1/2"	0.748	1.496	1.535
77352	3/4"	1.039	1.945	1.984
77357	1"	1.323	2.228	2.268
77362	1-1/4"	1.654	2.677	2.756
77367	1-1/2"	1.984	3.402	3.480
77372	2"	2.551	4.126	4.205



**Copper Reducing Elbow 90° P x P Model 2916.3**

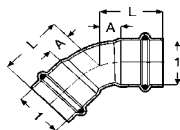
Stock Code	Size	A (in)	A1 (in)	L (in)	L1 (in)
	1 2				
77325	3/4" x 1/2"	0.906	0.945	1.811	1.693
77330	1" x 3/4"	1.205	1.303	2.110	2.209



**Copper Elbow 90° FTG x P Model 2947**

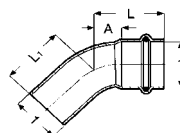
Stock Code	Size	Z (in)	L (in)	L1 (in)
	1 2			
77353	3/4" x 3/4"	1.039	1.945	6.000

## Dimensional documentation (inches)



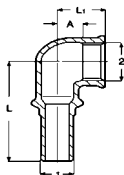
### Copper Elbow 45° P x P Model 2926

Stock Code	Size	A (in)	L (in)
	<b>1</b>		
77607	1/2"	0.295	1.043
77612	3/4"	0.433	1.339
77617	1"	0.551	1.457
77622	1-1/4"	0.685	1.709
77627	1-1/2"	0.823	2.240
77632	2"	1.059	2.634



### Copper Elbow 45° FTG x P Model 2926.1

Stock Code	Size	A (in)	L (in)	L1 (in)
	<b>1</b>			
77637	1/2"	0.311	1.059	1.098
77642	3/4"	0.433	1.339	1.374
77647	1"	0.551	1.457	1.492
77652	1-1/4"	0.685	1.709	1.787
77657	1-1/2"	0.823	2.240	2.319
77662	2"	1.059	2.634	2.709

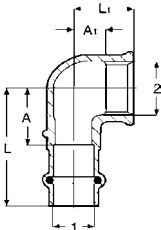


### Bronze Elbow 90° FTG x FNPT Model 2914.3

Stock Code	Size	A (in)	L (in)	L1 (in)
	<b>1 2</b>			
77577	1/2" x 1/2" NPT	0.331	2.008	0.866



Dimensional documentation (inches)

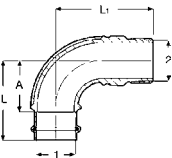


Bronze Elbow 90° P X FNPT Model 2914.2ZL

Stock Code	Size		A (in)	A1 (in)	L (in)	L1 (in)
	1	2				
79520	1/2" x 3/8" NPT		0.945	0.421	1.772	0.827
79525	1/2" x 1/2" NPT		0.945	0.567	1.772	1.102
79530	1/2" x 3/4" NPT		1.063	0.508	1.890	1.063
79535	3/4" x 1/2" NPT		1.063	0.646	1.969	1.181
79540	3/4" x 3/4" NPT		1.063	0.567	1.969	1.122
79545	1" x 1/2" NPT		1.063	0.724	1.969	1.260
79550	1" x 1" NPT		1.339	0.756	2.244	1.417
79560	1-1/4" x 1-1/4" NPT		1.535	0.894	2.559	1.575
79565	1-1/2" x 1-1/2" NPT		1.693	1.051	3.110	1.732
79570	2" x 2" NPT		2.165	1.350	3.740	2.047

Bronze Elbow 90° P x FNPT Model 2914.2

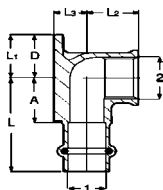
Stock Code	Size		A (in)	A1 (in)	L (in)	L1 (in)
	1	2				
22193	1/2" x 3/8" NPT		0.945	0.295	1.693	0.728
77532	1/2" x 1/2" NPT		0.984	0.331	1.732	0.866
77537	1/2" x 3/4" NPT		1.142	0.409	1.890	0.965
77542	3/4" x 3/4" NPT		1.150	0.488	2.055	1.043
77547	3/4" x 1/2" NPT		1.142	0.472	2.047	1.004
22203	1" x 1/2" NPT		1.299	0.709	2.205	1.260
77552	1" x 1" NPT		1.417	0.618	2.323	1.280
22198	1-1/4" x 1/2" NPT		1.260	0.728	2.283	1.260
77557	1-1/4" x 1-1/4" NPT		1.575	0.841	2.598	1.516
77562	1-1/2" x 1-1/2" NPT		1.614	1.012	3.031	1.693
77567	2" x 2" NPT		2.244	1.469	3.819	2.165



Bronze Elbow 90° P x MNPT Model 2914

Stock Code	Size		A (in)	A1 (in)	L1 (in)
	1	2			
77492	1/2" x 1/2" NPT		0.945	1.693	1.890
77497	1/2" x 3/4" NPT		0.945	1.693	2.047
77502	3/4" x 1/2" NPT		0.984	1.890	1.870
77507	3/4" x 3/4" NPT		1.102	2.008	2.323
77512	1" x 1" NPT		1.382	2.287	2.835
77517	1-1/4" x 1-1/4" NPT		1.870	2.894	3.465
77522	1-1/2" x 1-1/2" NPT		2.205	3.622	3.839
77527	2" x 2" NPT		2.756	4.331	4.724

## Dimensional documentation (inches)

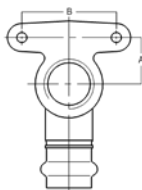


### Bronze Elbow Drop 90° P x FNPT with Wall Plate Model 2925.5ZL

Stock Code	Size	L (in)	L1 (in)	L2 (in)	L3 (in)	A (in)
	1 2					
79185	1/2" x 3/8"	1.768	0.736	0.827	0.669	0.945
79190	1/2" x 1/2"	1.772	0.736	1.102	0.669	0.945
79195	3/4" x 3/4"	1.969	0.835	1.122	0.835	1.063

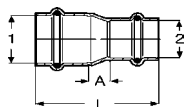
### Bronze Elbow Drop 90° P x FNPT with Wall Plate Model 2925.5

Stock Code	Size	L (in)	L1 (in)	L2 (in)	L3 (in)	A (in)
	1 2					
22223	1/2" x 3/8" NPT	1.770	0.830	0.510	0.730	1.020
77697	1/2" x 1/2" NPT	1.732	0.835	0.866	0.512	0.984
77702	3/4" x 3/4" NPT	2.047	1.181	1.122	0.835	1.142
72481	1" x 1" NPT	2.360	0.980	0.870	1.260	1.460



### Bronze Hi Ear 90° P x FNPT Model 2925.2

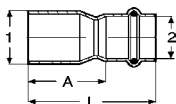
Stock Code	Size	A (in)	B (in)
	1		
77572	1/2"	.890	1.730



### Copper Reducer P x P Model 2915.2

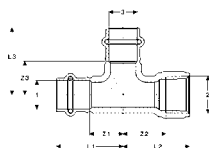
Stock Code	Size	A (in)	L (in)
	1 2		
78147	3/4" x 1/2"	0.445	2.071
15603	1" x 1/2"	0.736	2.362
78152	1" x 3/4"	0.504	2.287
15593	1-1/4" x 3/4"	0.728	2.638
78157	1-1/4" x 1"	0.614	2.524
18473	1-1/2" x 3/4"	0.994	3.327
15588	1-1/2" x 1"	0.768	3.071
78162	1-1/2" x 1-1/4"	0.528	2.959
18468	2" x 3/4"	1.524	4.016
15608	2" x 1"	1.319	3.780
22328	2" x 1-1/4"	0.827	3.425
78167	2" x 1-1/2"	0.846	3.827

## Dimensional documentation (inches)



### Copper Reducer FTG x P Model 2915.1

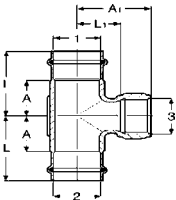
Stock Code	Size		A (in)	L (in)
	1	2		
78077	3/4"	1/2"	1.417	2.165
78082	1"	1/2"	1.693	2.441
78087	1"	3/4"	1.417	2.323
22333	1-1/4"	1/2"	2.185	2.933
78092	1-1/4"	3/4"	1.850	2.756
78097	1-1/4"	1"	1.575	2.480
15573	1-1/2"	1/2"	2.008	2.756
14543	1-1/2"	3/4"	2.559	3.465
78102	1-1/2"	1"	2.283	3.189
78107	1-1/2"	1-1/4"	2.047	3.071
15578	2"	1/2"	2.913	3.661
15583	2"	3/4"	2.874	3.780
78112	2"	1"	3.031	3.937
78117	2"	1-1/4"	2.795	3.819
78122	2"	1-1/2"	2.638	4.055



### Bronze Tee P x FNPT x P Model 2917.4

Stock Code	Size			Z1 (in)	Z2 (in)	Z3L (in)	L1 (in)	L2 (in)	L3 (in)
	1	2	3						
77583	1/2" x 1/2" NPT x 1/2"			0.75	0.96	0.75	1.50	1.50	1.50
77593	3/4" x 1/2" NPT x 3/4"			0.94	0.96	0.94	1.85	1.50	1.85
77588	3/4" x 3/4" NPT x 3/4"			1.94	1.14	0.94	1.85	1.69	1.85
77598	1" x 3/4" NPT x 1"			1.14	1.08	1.14	2.05	1.77	2.05
77603	1-1/4" x 3/4" NPT x 1-1/4"			1.26	1.20	1.26	2.28	1.89	2.28
77608	1-1/2" x 3/4" NPT x 1-1/2"			1.34	1.36	1.34	2.76	2.05	2.76
77613	2" x 3/4" x 2"			1.69	1.56	1.69	3.27	2.24	3.27

Dimensional documentation (inches)



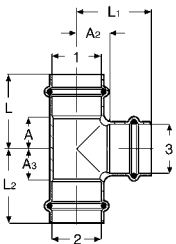
Bronze Tee P x P x FNPT Model 2917.2ZL

Stock Code	Size			A (in)	A1 (in)	L (in)	L1 (in)
	1	2	3				
79580	1/2"	1/2"	1/2"	0.945	0.803	1.693	1.339
79595	3/4"	3/4"	1/4"	0.768	0.929	1.673	1.378
79590	3/4"	3/4"	1/2"	1.004	1.138	1.909	1.673
79595	3/4"	3/4"	3/4"	0.984	0.850	1.890	1.417
79760	1"	1"	1/2"	1.004	1.236	1.909	1.772
79765	1"	1"	3/4"	1.161	1.413	2.067	1.969
79770	1-1/4"	1-1/4"	1/2"	0.886	1.394	1.909	1.929
79775	1-1/4"	1-1/4"	3/4"	0.945	1.531	1.969	2.087
79780	1-1/2"	1-1/2"	1/2"	0.748	1.433	2.165	1.969
79785	1-1/2"	1-1/2"	3/4"	0.878	1.531	2.303	2.087
79795	2"	2"	3/4"	1.083	1.543	2.657	2.362

Bronze Tee P x P x FNPT Model 2917.2

Stock Code	Size			A (in)	A1 (in)	L (in)	L1 (in)
	1	2	3				
77582	1/2"	1/2"	1/2" NPT	0.945	1.339	1.693	0.803
14563	3/4"	3/4"	1/4" NPT	0.768	1.378	1.673	0.928
77587	3/4"	3/4"	1/2" NPT	1.004	1.673	1.909	1.138
77589	3/4"	3/4"	3/4" NPT	1.000	0.875	1.875	1.375
77592	1"	1"	1/2" NPT	1.004	1.772	1.909	1.236
15623	1"	1"	3/4" NPT	1.161	1.969	2.067	1.343
77597	1-1/4"	1-1/4"	1/2" NPT	0.886	1.929	1.909	1.323
15618	1-1/4"	1-1/4"	3/4" NPT	0.945	1.929	1.969	1.303
78342	1-1/2"	1-1/2"	1/2" NPT	0.748	1.969	2.165	1.433
15613	1-1/2"	1-1/2"	3/4" NPT	0.886	2.087	2.303	1.461
77602	2"	2"	1/2" NPT	0.984	2.165	2.559	1.630
14558	2"	2"	3/4" NPT	1.083	2.362	2.657	1.736

Copper Tee P x P x P Model 2918



Stock Code	Size			A (in)	A2 (in)	A3 (in)	L (in)	L1 (in)	L2 (in)
	1	2	3						
77377	1/2"	1/2"	1/2"	0.738	0.498	0.738	1.496	1.443	1.496
77382	1-1/2"	1-1/2"	3/4"	0.906	0.591	0.906	1.654	1.496	1.654
15493	1-1/2"	1-1/2"	1"	1.102	0.551	1.102	1.850	1.457	1.850
77387	3/4"	3/4"	3/4"	0.837	0.591	0.837	1.752	1.496	1.752
77392	3/4"	1/2"	1/2"	0.687	0.630	0.984	1.594	1.378	1.732
77397	3/4"	1/2"	3/4"	0.844	0.591	1.142	2.752	1.496	1.890
77402	3/4"	3/4"	1/2"	0.687	0.630	0.687	1.594	1.378	1.594
77407	3/4"	3/4"	1"	0.965	0.630	0.965	1.870	1.535	1.870
77412	1"	1"	1"	0.955	0.787	0.955	1.870	1.693	1.870
22263	1"	1/2"	3/4"	0.846	0.748	1.240	1.752	1.654	1.988
94767	1"	1/2"	1"	0.978	0.787	1.516	1.870	1.693	2.264
77417	1"	3/4"	1/2"	0.703	0.787	0.886	1.594	1.535	1.791
77422	1"	3/4"	3/4"	0.837	0.748	1.043	1.752	1.654	1.949
77427	1"	3/4"	1"	0.709	0.787	1.161	1.870	1.693	2.067

Continued on next page

Dimensional documentation (inches)

Continued from  
previous page

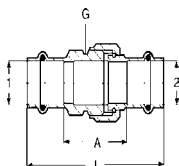
Copper Tee P x P x P Model 2918

Stock Code	Size			A (in)	A2 (in)	A3 (in)	L (in)	L1 (in)	L2 (in)
	1	2	3						
77432	1" x 1" x 1/2"			0.689	0.787	0.689	1.594	1.535	1.594
77437	1" x 1" x 3/4"			0.844	0.748	0.844	1.752	1.654	1.752
15488	1" x 1" x 1 1/4"			1.161	0.837	1.161	2.067	1.870	2.067
77442	1 1/4"			1.024	0.866	1.024	2.047	1.890	2.047
22253	1-1/4" x 1/2" x 1-1/4"			1.024	0.866	1.772	2.047	1.890	2.520
22243	1-1/4" x 3/4" x 1/2"			0.650	0.925	1.122	1.673	1.673	2.028
22258	1-1/4" x 3/4" x 3/4"			0.768	0.866	1.299	1.791	1.772	2.205
22268	1-1/4" x 3/4" x 1"			0.886	0.906	1.398	1.929	1.811	2.303
22248	1-1/4" x 3/4" x 1-1/4"			1.024	0.866	1.535	2.047	1.890	2.441
22238	1-1/4" x 1" x 1/2"			0.650	0.925	0.906	1.673	1.673	1.811
94762	1-1/4" x 1" x 3/4"			0.768	0.866	1.142	1.791	1.772	2.047
14568	1-1/4" x 1" x 1"			0.886	0.906	1.280	1.909	1.811	2.185
94757	1-1/4" x 1-1/4" x 1/2"			0.650	0.925	0.650	1.673	1.673	1.673
77452	1-1/4" x 1-1/4" x 3/4"			0.768	0.886	0.768	1.791	1.772	1.791
77447	1-1/4" x 1-1/4" x 1"			0.886	0.906	0.886	1.909	1.811	1.909
77457	1-1/2"			1.142	1.142	1.142	2.559	2.559	2.559
15468	1-1/2" x 1" x 3/4"			0.906	1.299	1.063	2.323	2.205	1.969
15458	1-1/2" x 1" x 1"			0.738	1.063	1.535	2.165	1.969	2.441
15463	1-1/2" x 1" x 1-1/2"			1.132	1.132	1.831	2.559	2.559	2.736
22233	1-1/2" x 1-1/4" x 3/4"			0.669	1.142	1.083	2.087	2.047	2.106
15453	1-1/2" x 1-1/4" x 1"			0.738	1.181	1.289	2.165	2.087	2.323
15483	1-1/2" x 1-1/4" x 1-1/4"			0.886	1.142	1.339	2.283	2.165	2.362
15448	1-1/2" x 1-1/2" x 1/2"			0.463	1.102	0.463	1.890	1.850	1.890
77462	1-1/2" x 1-1/2" x 3/4"			0.669	1.142	0.669	2.087	2.047	2.087
77467	1-1/2" x 1-1/2" x 1"			0.748	1.181	0.748	2.165	2.087	2.165
77472	1-1/2" x 1-1/2" x 1-1/4"			0.886	1.142	0.866	2.283	2.165	2.283
77477	2"			1.378	1.378	1.378	2.953	2.953	2.953
15518	2" x 1-1/4" x 1-1/4"			0.935	1.329	1.841	2.520	2.362	2.874
15498	2" x 1-1/2" x 1"			0.817	1.378	1.447	2.402	2.283	2.874
15513	2" x 1-1/2" x 3/4"			0.709	1.378	1.260	2.283	2.283	2.677
15508	2" x 1-1/2" x 1-1/4"			0.935	1.486	1.545	2.520	2.520	2.972
15503	2" x 1-1/2" x 1-1/2"			1.142	1.378	1.654	2.717	2.795	3.071
22228	2" x 1-1/2" x 2"			1.378	1.378	1.890	2.953	2.953	3.327
15538	2" x 2" x 1/2"			0.541	1.299	0.541	2.126	2.047	2.126
94777	2" x 2" x 3/4"			0.797	1.260	0.797	2.372	2.165	2.372
94772	2" x 2" x 1"			0.915	1.299	0.915	2.490	2.205	2.490
77487	2" x 2" x 1-1/4"			1.043	1.378	1.043	2.618	2.402	2.618
77482	2" x 2" x 1-1/2"			1.142	1.378	1.142	2.717	2.795	2.717

Bronze Tee P x P x P Model 2918.4

Stock Code	Size			A (in)	A2 (in)	A3 (in)	L (in)	L1 (in)	L2 (in)
	1	2	3						
15473	1-1/2" x 1/2" x 1-1/2"			1.240	1.240	1.417	2.657	2.657	2.165
15478	1-1/2" x 3/4" x 3/4"			0.906	1.299	1.229	2.323	2.205	2.205
15533	2" x 1/2" x 2"			1.772	1.772	1.535	3.346	3.346	2.283
15523	2" x 1" x 1"			1.220	1.772	1.732	2.795	2.638	2.638
15528	2" x 1" x 2"			1.772	1.722	2.244	3.346	3.346	3.150

## Dimensional documentation (inches)

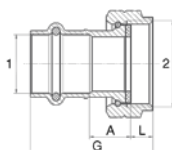


### Bronze Union P x P Model 2960ZL

Stock Code	Size	A (in)	L (in)	G (in)
	1 2			
79125	1/2"	1.264	2.917	3/4"
79130	3/4"	1.339	3.150	1"
79135	1"	1.827	3.638	1-1/4"
79140	1-1/4"	1.634	3.681	1-1/2"
79145	1-1/2"	2.126	4.961	2"
79150	2"	2.067	5.217	2-1/2"

### Bronze Union P x P Model 2960

Stock Code	Size	A (in)	L (in)	G (in)
	1 2			
77667	1/2"	1.260	2.756	3/4
77672	3/4"	1.335	3.146	1
77677	1"	1.827	3.638	1-1/4
77682	1-1/4"	1.634	3.681	1-1/2
77687	1-1/2"	2.126	4.962	2
77692	2"	2.067	5.217	2-1/2



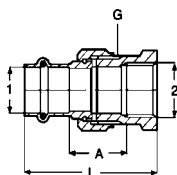
### Bronze Tailpiece Adapter P x FBSP Union Model 2957ZL

Stock Code	Size	A (in)	L (in)	G (in)
	1 2			
79800	1/2" x 1" BSP	0.393	0.354	1.496
79805	3/4" x 1" BSP	0.629	0.334	1.870
79810	1" x 1" BSP	0.807	0.334	2.047
79815	1" x 1-1/4" BSP	0.728	0.413	2.047

### Bronze Tailpiece Adapter P x FBSP Union Model 2957

Stock Code	Size	A (in)	L (in)	G (in)
	1 2			
77753	1/2" x 1" BSP	0.393	0.354	1.496
77758	3/4" x 1" BSP	0.629	0.334	1.870
77763	1" x 1" BSP	0.807	0.334	2.047
77764	1" x 1-1/4" BSP	0.728	0.413	2.047

## Dimensional documentation (inches)

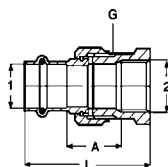


### Bronze Union P x FNPT Model 2962ZL

Stock Code	Size	A (in)	L (in)	G (in)
	1 2			
79700	1/2"	0.984	2.346	3/4"
79705	3/4"	0.957	2.417	1"
79710	1"	1.303	2.870	1-1/4"
79715	1-1/4"	1.268	2.972	1-1/2"
79720	1-1/2"	1.760	3.858	2"
79725	2"	1.646	3.917	2-1/2"

### Bronze Union P x FNPT Model 2962

Stock Code	Size	A (in)	L (in)	G (in)
	1 2			
77752	1/2" x 1/2" NPT	0.961	2.244	3/4"
77757	3/4" x 3/4" NPT	0.957	2.417	1"
77762	1" x 1" NPT	1.303	2.870	1-1/4"
77767	1-1/4" x 1-1/4" NPT	1.268	2.972	1-1/2"
77772	1-1/2" x 1-1/2" NPT	1.760	3.858	2"
77777	2" x 2" NPT	1.646	3.917	2-1/2"



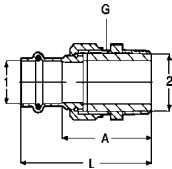
### Di-electric Union P x FNPT Model 2967ZL

Stock Code	Size	A (in)	L (in)	G (in)
	1 2			
79155	1/2"	0.882	2.244	1-1/4"
79160	3/4"	1.110	2.571	1-1/2"
79165	1"	1.004	2.571	1-1/2"
79170	1-1/4"	0.972	2.677	2"
79175	1-1/2"	1.012	3.110	2-1/4"
79180	2"	1.260	3.531	2-3/4"

### Bronze Di-electric Union P x FNPT Model 2967

Stock Code	Size	A (in)	L (in)	G (in)
	1 2			
15558	1/2" x 1/2" NPT	0.961	2.244	1-1/4"
15568	3/4" x 3/4" NPT	1.110	2.571	1-1/2"
15553	1" x 1" NPT	1.004	2.571	1-1/2"
15548	1-1/4" x 1-1/4" NPT	0.972	2.677	2"
15543	1-1/2" x 1-1/2" NPT	1.004	3.102	2-1/4"
15563	2" x 2" NPT	1.260	3.531	2-3/4"

Dimensional documentation (inches)



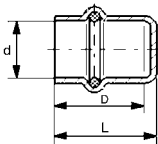
Bronze Union P x MNPT Model 2965ZL

Stock Code	Size	A (in)	L (in)	G (in)
	1 2			
79730	1/2"	1.937	2.764	3/4"
79735	3/4"	1.996	2.902	1"
79740	1"	2.539	3.445	1-1/4"
79745	1-1/4"	2.492	3.516	1-1/2"
79750	1-1/2"	3.051	4.469	2"
79755	2"	2.992	4.567	2-1/2"

Bronze Union P x MNPT Model 2965

Stock Code	Size	A (in)	L (in)	G (in)
	1 2			
77782	1/2" x 1/2" NPT	2.087	2.835	3/4
77787	3/4" x 3/4" NPT	2.142	3.047	1
77792	1" x 1" NPT	2.732	3.638	1-1/4
77797	1-1/4" x 1-1/4" NPT	2.677	3.701	1-1/2
77802	1-1/2" x 1-1/2" NPT	3.228	4.646	2
77807	2" x 2" NPT	3.169	4.744	2-1/2

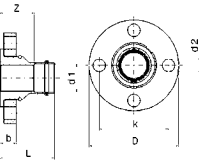
Copper Cap P Model 2956



Stock Code	Size	L (in)	D (in)
	d		
77712	1/2"	.917	0.799
77717	3/4"	1.067	0.945
77722	1"	1.110	0.992
77727	1-1/4"	1.181	1.024
77732	1-1/2"	1.622	1.465
77737	2"	1.811	1.575

Bronze Adapter Flange P x Flange Model 2959.5ZL

Stock Code	Size	L (in)	Z (in)	b1 (in)	b2 (in)	D (in)	K (in)	d2 (in)
	d1							
79680	1"	2.756	1.850	0.630	0.827	4.331	3.110	0.630
79685	1-1/4"	2.756	1.850	0.630	0.827	4.528	3.504	0.630
79690	1-1/2"	3.071	1.654	0.630	0.827	4.921	3.858	0.630
79695	2"	3.661	2.087	0.630	0.827	5.906	4.764	0.748

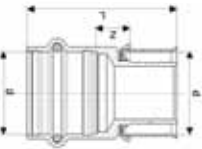


Bronze Adaptor Flange P x Flange Model 2959.5

Stock Code	Size	L (in)	Z (in)	b1 (in)	b2 (in)	D (in)	K (in)	d2 (in)
	d1							
19708	1"	2.756	1.850	0.630	0.827	4.331	3.110	0.630
19713	1-1/4"	2.756	1.850	0.630	0.827	4.528	3.504	0.630
19718	1-1/2"	3.071	1.654	0.630	0.827	4.921	3.858	0.630
19723	2"	3.661	2.087	0.630	0.827	5.906	4.764	0.748

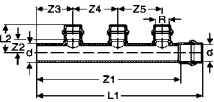


Dimensional documentation (inches)



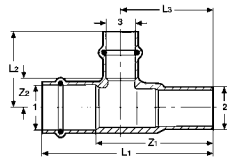
PEX Press Adapter PEX x P Model 2831PZL

Stock Code	Size	L (in)	Z (in)
	d		
99620	1/2"	0.291	1.614
99626	1/2" x 3/4"	0.429	1.831
99630	3/4" x 1/2"	0.232	1.555
99640	3/4"	0.331	1.732
99660	1"	0.453	1.969
99670	1-1/4"	0.492	2.382
99680	1-1/2"	0.591	2.874
99690	2"	0.583	3.209



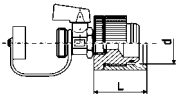
Copper ProPress Manifold 3-Outlet (open)  
P x FTG x P Model 2845

Stock Code	Size	L1 (in)	L2 (in)	Z1 (in)	Z2 (in)	Z3 (in)	Z4 (in)	Z5 (in)
	d x R							
65803	1" x 1/2"	7.323	1.512	6.378	0.773	1.654	1.969	1.969



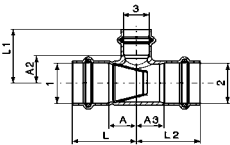
Copper ProPress Manifold 1-Outlet (open)  
P x FTG x P Model 2845

Stock Code	Size	Z1 (in)	Z2 (in)	L1 (in)	L2 (in)	L3 (in)
	1 x 2 x 3					
65801	1" x 1" x 1/2"	2.500	.0787	3.661	1.535	2.067



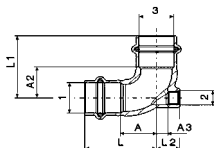
Bronze Pressure Test Plug Model 2969

Stock Code	Size	L (in)
	d	
78202	1/2"	1.654
78207	3/4"	1.654



Copper Venturi Tee P x P x P Model 2918.5

Stock Code	Size	A (in)	A2 (in)	A3 (in)	L (in)	L1 (in)	L2 (in)
	1 2 3						
23388	3/4" x 3/4" x 1/2"	0.689	0.630	0.433	1.594	1.378	1.594
23393	1" x 1" x 1/2"	0.689	0.787	0.689	1.594	1.535	1.594
23398	1" x 1" x 3/4"	0.846	0.748	0.591	1.752	1.654	1.752
23403	1-1/4" x 1-1/4" x 1/2"	0.650	0.925	0.650	1.673	1.673	1.673
23408	1-1/4" x 1-1/4" x 3/4"	0.768	0.866	0.768	1.791	1.772	1.791



Stock Code	Size			A (in)	A2 (in)	A3 (in)	L (in)	L1 (in)	L2 (in)
	1	2	3						
79635	1/2" x 1/8" NPT x 1/2"			0.669	0.669	0.437	1.496	1.496	0.709
79640	3/4" x 1/8" NPT x 1/2"			0.827	0.827	0.535	1.732	1.732	0.807

Stock Code	Size			A (in)	A2 (in)	A3 (in)	L (in)	L1 (in)	L2 (in)
	1	2	3						
14573	1/2" x 1/8" NPT x 1/2"			0.748	0.748	0.315	1.496	1.496	0.591
14578	3/4" x 1/8" NPT x 3/4"			0.906	0.906	0.315	1.811	1.811	0.591

## Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

# ProPress XL-C (Copper)

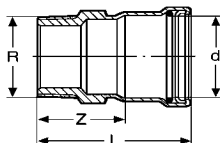
2-1/2" to 4" fittings

Dimensional documentation



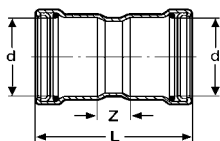
# ProPress XL-C (Copper) 2-1/2" to 4"

## Dimensional documentation (inches)



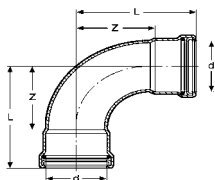
### Adapter P x MNPT (Copper) Model 0911XL

Stock Code	Size	Z (in)	L (in)
	d R		
20823	2-1/2" x 2-1/2" NPT	2.520	4.213
20828	3" x 3" NPT	2.598	4.567
20838	4" x 4" NPT	2.736	5.098



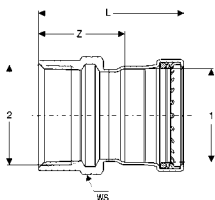
### Coupling P x P with Stop (Copper) Model 0915XL

Stock Code	Size	Z (in)	L (in)
	d		
20728	2-1/2"	0.945	4.331
20733	3"	0.984	4.921
20738	4"	1.063	5.787



### Elbow 90° P x P (Copper) Model 0916XL

Stock Code	Size	Z (in)	L (in)
	d		
20623	2-1/2"	3.189	4.882
20628	3"	3.760	5.728
20633	4"	4.902	7.264

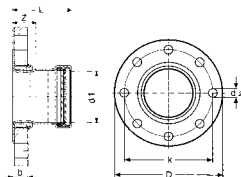


### Adapter P x FNPT (Copper) Model 0912XL

Stock Code	Size	Z(in)	L(in)
	1 2		
20819	2 1/2" x 2 1/2" NPT	2.46	4.15
20829	3" x 3" NPT	2.60	4.57
20839	4" x 4" NPT	2.78	5.14

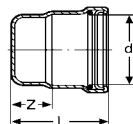
# ProPress XL-C (Copper) 2-1/2" to 4"

## Dimensional documentation (inches)



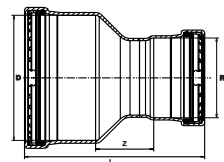
### Adapter Flange P x Flange (Copper/Steel) Model 0959.5XL

Stock Code	Size	Z (in)	L (in)	b (in)	k (in)	D (in)	d2 (in)
	d1						
20853	2-1/2"	1.102	2.795	0.787	5.512	7.087	0.748
20858	3"	1.201	3.169	0.787	5.984	7.480	0.748
20863	4"	1.204	3.602	0.807	7.520	9.055	0.748



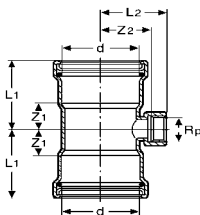
### Cap P (Copper) Model 0956XL

Stock Code	Size	Z (in)	L (in)
	d		
20833	2-1/2"	1.339	3.031
20643	3"	1.358	3.327
20848	4"	1.398	3.760



### XL-C Reducer P x P (Copper) Model 0915.2XL

Stock Code	Size	Z (in)	L (in)
	D R		
20685	2-1/2" x 1"	1.759	4.358
20690	2-1/2" x 1-1/4"	1.610	4.338
20695	2-1/2" x 1-1/2"	1.519	4.637
20700	2-1/2" x 2"	1.413	4.688
20705	3" x 1-1/2"	1.775	5.173
20710	3" x 2"	1.527	5.078
20715	3" x 2-1/2"	1.405	5.066
20720	4" x 2"	2.055	5.999
20725	4" x 2-1/2"	1.933	5.938
20730	4" x 3"	1.700	6.031

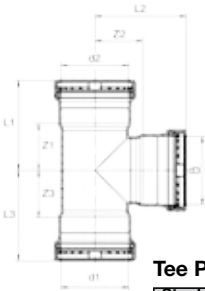


### Tee P x P x FNPT (Copper) Model 0917.2XL

Stock Code	Size	Z1 (in)	Z2 (in)	L1 (in)	L2 (in)
	d d Rp				
20868	4" x 4" x 2"	1.594	2.598	3.957	3.287
20873	4" x 4" x 3/4"	0.965	2.461	3.327	3.071
20878	2-1/2" x 2-1/2" x 2"	1.535	1.831	3.228	2.520
22883	2-1/2" x 2-1/2" x 3/4"	0.906	1.693	2.598	2.303
22893	3" x 3" x 3/4"	0.925	1.949	2.894	2.559
20888	3" x 3" x 3"	1.555	1.984	3.523	2.854

ProPress XL-C (Copper) 2-1/2" to 4"

Dimensional documentation (inches)

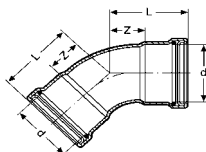


Tee P x P x P (Copper) Model 0918XL

Stock Code	Size	Z1 (in)	Z2 (in)	Z3 (in)	L1 (in)	L2 (in)	L3 (in)
	d1 d2 d3						
20704	2-1/2" x 2" x 3/4"	1.586	1.614	1.043	3.169	2.519	2.736
20709	2 1/2" x 2" x 1"	1.653	1.732	1.043	3.240	2.637	3.240
22283	2-1/2" x 2" x 1-1/2"	1.909	1.732	1.299	3.504	3.169	2.992
22278	2-1/2" x 2" x 2"	2.232	1.732	1.535	3.819	3.854	3.193
20714	2-1/2" x 2" x 2-1/2"	2.411	1.870	1.830	3.996	3.562	3.523
22298	2-1/2" x 2-1/2" x 3/4"	0.906	1.575	0.906	2.598	2.480	2.598
22303	2-1/2" x 2-1/2" x 1/2"	0.906	1.516	0.906	2.598	2.264	2.598
22293	2-1/2" x 2-1/2" x 1"	1.043	1.732	1.043	2.736	2.638	2.736
22288	2-1/2" x 2-1/2" x 1-1/4"	1.161	1.713	1.161	2.854	2.756	2.854
20803	2-1/2" x 2-1/2" x 1-1/2"	1.299	1.732	1.299	2.992	3.169	2.992
20688	2-1/2" x 2-1/2" x 2"	1.535	1.732	1.535	3.228	3.327	3.228
20683	2-1/2"	1.831	1.870	1.831	3.524	3.563	3.524
20694	2-1/2" x 1-1/4" x 2-1/2"	3.236	1.870	1.830	4.271	3.524	4.232
20689	2-1/2" x 1" x 2-1/2"	3.287	1.870	1.830	4.192	3.524	4.154
20684	2-1/2" x 3/4" x 2-1/2"	3.228	1.870	1.830	4.133	3.524	4.134
22323	3" x 3" x 3/4"	0.925	1.870	.925	2.894	2.776	2.894
22308	3" x 3" x 1"	1.063	1.988	1.063	3.031	2.894	3.031
22313	3" x 3" x 1-1/4"	1.181	1.969	1.181	3.150	3.012	3.150
20798	3" x 3" x 1-1/2"	1.299	1.988	1.299	3.287	3.425	3.287
20698	3" x 3" x 2"	1.555	1.988	1.555	3.524	3.583	3.524
20703	3" x 3" x 2-1/2"	1.850	2.126	1.850	3.819	3.819	3.819
20734	3" x 2" x 2-1/2"	2.629	2.125	1.850	4.212	3.818	3.818
20732	3" x 2" x 2"	2.334	1.999	1.555	3.917	3.582	3.523
20727	3" x 1-1/2" x 3"	3.751	2.145	2.066	5.177	5.138	4.035
20729	3" x 1-1/4" x 3"	3.870	2.145	2.066	4.901	4.862	4.035
20724	3" x 1" x 3"	3.996	2.145	2.066	3.996	4.862	4.035
20719	3" x 3/4" x 3"	3.818	2.145	2.066	4.724	4.114	4.035
20693	3"	2.067	2.146	2.067	4.035	4.114	4.035
20739	3" x 2" x 3"	2.067	2.146	2.854	4.035	4.114	4.429
20794	4" x 4" x 1"	1.358	2.499	1.358	3.720	3.405	3.720
20795	4" x 4" x 1-1/4"	1.358	2.490	1.358	3.720	3.523	3.720
20808	4" x 4" x 1-1/2"	1.358	2.500	1.358	3.720	3.937	3.720
20713	4" x 4" x 2"	1.594	2.500	1.594	3.957	4.094	3.957
20718	4" x 4" x 2-1/2"	1.890	2.638	1.890	4.252	4.331	4.252
20723	4" x 4" x 3"	2.106	2.657	2.106	4.469	4.626	4.469
20708	4"	2.598	2.697	2.598	4.961	5.059	4.961
247031	4" x 4" x 1/2"	1.083	2.244	1.083	3.445	2.992	3.445
246987	4" x 4" x 3/4"	1.083	2.315	1.083	3.445	3.220	3.445

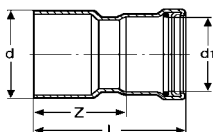
# ProPress XL-C (Copper) 2-1/2" to 4"

## Dimensional documentation (inches)



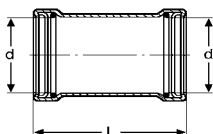
### Elbow 45° P x P (Copper) Model 0926XL

Stock Code	Size	Z (in)	L (in)
	<b>d</b>		
20653	2-1/2"	1.476	3.169
20658	3"	1.732	3.701
20663	4"	2.224	4.587



### Reducer FTG x P (Copper) Model 0915.1XL

Stock Code	Size	Z (in)	L (in)
	<b>d d1</b>		
20758	2-1/2" x 2"	2.264	3.858
20763	3" x 2"	2.815	4.409
20768	3" x 2-1/2"	2.559	4.252
20773	4" x 2"	4.232	5.807
20778	4" x 2-1/2"	4.173	5.787
20783	4" x 3"	3.957	5.846
20813	2-1/2" x 1-1/2"	2.480	3.937
20818	3" x 1-1/2"	3.346	4.803
20814	2-1/2" x 1"	3.610	4.515
20815	2-1/2" x 1-1/4"	3.464	4.488
20817	3" x 1-1/4"	3.976	4.999

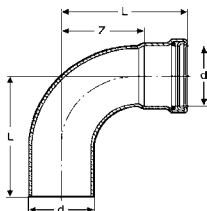


### Coupling P x P No Stop (Copper) Model 0915.5XL

Stock Code	Size	L (in)
	<b>d d1</b>	
20743	2-1/2"	4.331
20748	3"	4.921
20753	4"	5.787

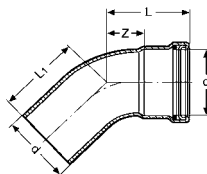
## ProPress XL-C (Copper) 2-1/2" to 4"

Dimensional documentation (inches)



**90° Elbow FTG x P (Copper) Model 0916.1XL**

Stock Code	Size	Z (in)	L (in)	L1 (in)
	d			
20638	2-1/2"	3.189	4.882	4.803
20643	3"	3.760	5.728	5.630
20548	4"	4.902	7.264	7.126



**Elbow 45° FTG x P (Copper) Model 0926.1XL**

Stock Code	Size	Z (in)	L (in)	L1 (in)
	d			
20668	2-1/2"	1.476	3.169	3.091
20673	3"	1.732	3.701	3.602
20678	4"	2.224	4.587	4.449

## Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins or other markings on the paper.



# ProPress XL (Bronze)

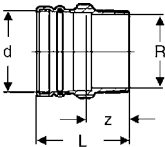
2-1/2" to 4" fittings

Dimensional documentation



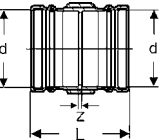
ProPress XL (Bronze) 2-1/2" to 4"

Dimensional documentation (inches)



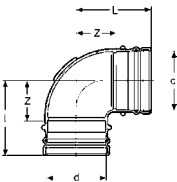
Adapter P x MNPT Model 2911XL

Stock Code	Material	Size	Z (in)	L (in)
		d R		
91332	Bronze	2-1/2"x 2-1/2" NPT	2.047	4.213
91337	Bronze	3"x 3" NPT	2.047	4.213
91327	Bronze	4"x 4" NPT	1.969	4.528



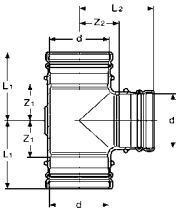
Coupling P x P with Stop Model 2915XL

Stock Code	Material	Size	Z (in)	L (in)
		d		
91342	Bronze	2-1/2"	0.315	4.528
91347	Bronze	3"	0.315	4.528
91352	Bronze	4"	0.315	5.315



Elbow 90° P x P Model 2916XL

Stock Code	Material	Size	Z (in)	L (in)
		d		
91357	Bronze	2-1/2"	2.165	4.331
91362	Bronze	3"	2.362	4.528
91367	Bronze	4"	2.894	5.453

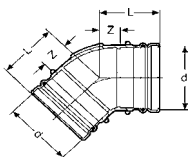


Tee P x P x P Model 2918XL

Stock Code	Material	Size			Z1 (in)	Z2 (in)	L1 (in)	L2 (in)
		d1	d2	d3				
91372	Bronze	2-1/2"			2.224	2.224	4.331	4.331
15633	Bronze	2-1/2" x 2-1/2" x 1-1/2"			1.618	2.283	3.602	3.701
91377	Bronze	3"			2.421	2.421	4.528	4.528
15638	Bronze	3" x 3" x 1-1/2"			1.618	2.480	3.720	3.898
91382	Bronze	4"			2.933	2.933	5.453	5.453
91387	Bronze	4" x 4" x 2"			1.831	3.071	4.331	4.665
91392	Bronze	4" x 4" x 2-1/2"			2.165	2.894	4.724	5.059
91397	Bronze	4" x 4" x 3"			2.362	2.894	4.921	5.059
15643	Bronze	4" x 4" x 1-1/2"			1.598	3.130	4.094	4.547
91402	Bronze	2-1/2" x 2-1/2" x 2"			1.831	2.205	3.937	3.819
91407	Bronze	3" x 3" x 2"			1.831	2.441	3.937	4.016
91412	Bronze	3" x 3" x 2-1/2"			2.165	2.362	4.331	4.547

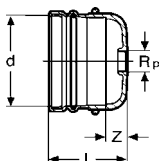
# ProPress XL (Bronze) 2-1/2" to 4"

## Dimensional documentation (inches)



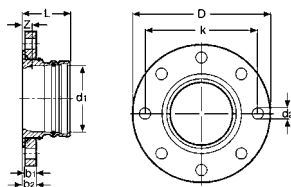
**Elbow 45° P x P Model 2926XL**

Stock Code	Material	Size d	Z (in)	L (in)
91417	Bronze	2-1/2"	1.083	3.248
91422	Bronze	3"	1.181	3.346
91427	Bronze	4"	1.358	3.917



**Cap P Model 2956XL**

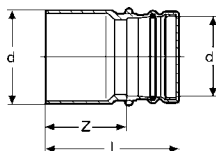
Stock Code	Material	Size d R <sub>p</sub>	Z (in)	L (in)
91432	Bronze	2-1/2"x 3/4" NPT	0.827	2.992
91437	Bronze	3"x 3/4" NPT	0.846	3.012
91442	Bronze	4"x 3/4" NPT	0.945	3.504



**Adapter Flange P x Flange Model 2959.5XL**

Stock Code	Material	Size d1	Z (in)	L (in)	b1 (in)	b2 (in)	k (in)	D (in)	d2 (in)
19728	Bronze	2-1/2"	0.984	3.091	0.787	0.827	5.512	7.087	0.748
19733	Bronze	3"	1.024	3.150	0.787	0.906	5.984	7.480	0.748
19738	Bronze	4"	0.630	3.150	0.807	0.906	7.520	9.055	0.748

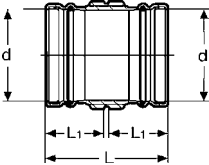
**Reducer FTG x P Model 2915.1XL**



Stock Code	Material	Size d d1	Z (in)	L (in)
91452	Bronze	4" x 2-1/2"	3.150	4.567
91472	Bronze	3" x 2-1/2"	2.819	4.921
91457	Bronze	4" x 3"	3.031	4.606

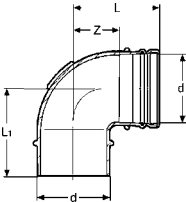
ProPress XL (Bronze) 2-1/2" to 4"

Dimensional documentation (inches)



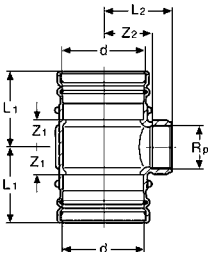
Coupling P x P No Stop Model 2915.5XL

Stock Code	Material	Size	L (in)	L1 (in)
		d		
91467	Bronze	2-1/2"	4.528	2.185
91472	Bronze	3"	4.528	2.185
17593	Bronze	4"	5.315	2.579



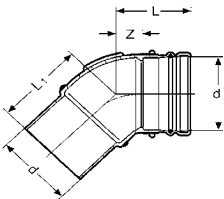
Elbow 90° FTG x P Model 2916.1XL

Stock Code	Material	Size	Z (in)	L (in)	L1 (in)
		d			
91492	Bronze	2-1/2"	2.224	4.331	4.606
91497	Bronze	3"	2.559	4.685	4.803
91502	Bronze	4"	2.972	5.472	5.591



Tee P x P x FNPT Model 2917.2XL

Stock Code	Material	Size			Z1 (in)	Z2 (in)	L1 (in)	L2 (in)
		d	d	Rp				
91507	Bronze	4"x4"x2"			1.535	2.717	4.035	3.583
91512	Bronze	4"x4"x3/4"			1.220	2.520	3.740	3.209
91517	Bronze	2-1/2"x2-1/2"x2"			1.929	1.929	4.035	2.795
91522	Bronze	2-1/2"x2-1/2"x3/4"			1.240	1.772	3.346	2.461
91527	Bronze	3"x3"x2"			1.929	2.205	4.035	3.071
91532	Bronze	3"x3"x3/4"			1.220	2.047	3.346	2.756



Elbow 45° FTG x P Model 2926.1XL

Stock Code	Material	Size	Z (in)	L (in)	L1 (in)
		d			
91537	Bronze	2-1/2"	1.142	3.248	3.819
91542	Bronze	3"	1.240	3.346	4.094
91547	Bronze	4"	1.417	3.898	4.921

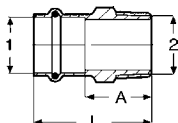
# ProPressG

1/2" to 2" fittings

Dimensional documentation

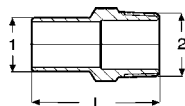


## Dimensional documentation (inches)



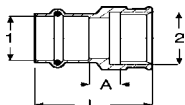
### Bronze Adapter P x M NPT - Model 0611

Stock Code	Size	A (in)	A (mm)	L (in)	L (mm)
	1 2				
16043	1/2" x 3/8" NPT	0.965	24.5	1.713	43.5
16048	1/2" x 1/2" NPT	1.122	28.5	1.870	47.5
16053	3/4" x 3/4" NPT	1.181	30	2.087	53
16058	1" x 1" NPT	1.457	37	2.362	60
16063	1-1/4" x 1-1/4" NPT	1.535	39	2.559	65
16068	1-1/2" x 1-1/2" NPT	1.535	39	2.953	75
16073	2" x 2" NPT	1.673	42.5	3.248	82.5



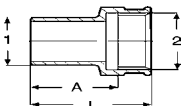
### Bronze Adapter FTG x M NPT - Model 0611.1

Stock Code	Size	L (in)
	1 2	
23203	1/2" x 1/2" NPT	1.949
23208	3/4" x 3/4" NPT	2.047
23218	1" x 1" NPT	2.224
23223	1-1/4" x 1-1/4" NPT	2.539
23228	1-1/2" x 1-1/2" NPT	2.894
23233	2" x 2" NPT	3.189



### Bronze Adapter P x F NPT - Model 0612

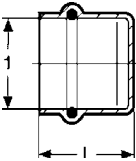
Stock Code	Size	A (in)	A (mm)	L (in)	L (mm)
	1 2				
16078	1/2" x 1/2" NPT	0.291	7.4	1.575	40
16083	3/4" x 1/2" NPT	0.331	8.4	1.772	45
16088	3/4" x 3/4" NPT	0.390	9.9	1.850	47
16093	1" x 1" NPT	0.480	12.2	2.047	52



### Adapter FTG x F NPT - Model 0612.1

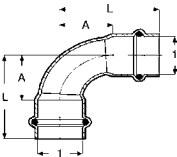
Stock Code	Size	A (in)	L (in)
	1 2		
23238	1/2" x 1/2" NPT	1.217	1.752
23243	3/4" x 3/4" NPT	1.276	1.831
23253	1" x 1" NPT	1.327	1.988
23258	1-1/4" x 1-1/4" NPT	1.504	2.185
23263	1-1/2" x 1-1/2" NPT	1.878	2.559
23268	2" x 2" NPT	2.118	2.815

Dimensional documentation (inches)



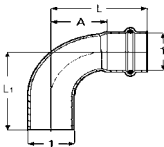
Bronze Cap P - Model 0656

Stock Code	Size	L (in)	L (mm)
	1		
16313	1/2"	0.917	23.3
16318	3/4"	1.067	27.1
16323	1"	1.110	28.2
16328	1-1/4"	1.319	33.5
16333	1-1/2"	1.622	41.2
16338	2"	1.811	46



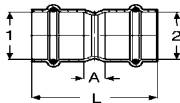
Copper Elbow 90° P x P Close Rough - Model 0616

Stock Code	Size	A (in)	A (mm)	L (in)	L (mm)
	1				
16128	1/2"	0.748	19	1.496	38
16133	3/4"	1.039	26.4	1.945	49.4
16138	1"	1.323	33.6	2.228	56.6
16143	1-1/4"	1.654	42	2.677	68
16148	1-1/2"	1.984	50.4	3.402	86.4
16153	2"	2.551	64.8	4.126	104.8



Copper Elbow 90° FTG x P Close Rough - Model 0616.1

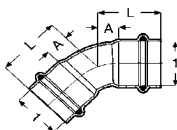
Stock Code	Size	A (in)	A (mm)	L (in)	L (mm)	L1 (in)	L1 (mm)
	1						
16158	1/2"	0.748	19	1.496	38	1.535	39
16163	3/4"	1.039	26.4	1.945	49.4	1.984	50.4
16168	1"	1.323	33.6	2.228	56.6	2.268	57.6
16173	1-1/4"	1.654	42	2.677	68	2.756	70
16178	1-1/2"	1.984	50.4	3.402	86.4	3.480	88.4
16183	2"	2.551	64.8	4.126	104.8	4.205	206.8



Copper Coupling 90° P x P with Stop - Model 0615

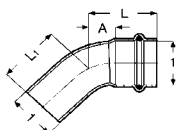
Stock Code	Size	A (in)	A (mm)	L (in)	L (mm)
	1				
16098	1/2"	0.236	6	1.732	44
16103	3/4"	0.394	10	2.205	56
16108	1"	0.394	10	2.205	56
16113	1-1/4"	0.394	10	2.441	62
16118	1-1/2"	0.472	12	3.307	84
16123	2"	0.472	12	3.622	92

## Dimensional documentation (inches)



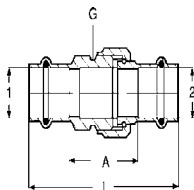
### Copper Elbow 45° P x P - Model 0626

Stock Code	Size	A (in)	A (mm)	L (in)	L (mm)
	<b>1</b>				
16188	1/2"	0.295	7.5	1.043	26.5
16193	3/4"	0.433	11	1.339	34
16198	1"	0.551	14	1.457	37
16203	1-1/4"	0.685	17.4	1.709	43.4
16208	1-1/2"	0.823	20.9	2.240	56.9
16213	2"	1.059	26.9	2.634	66.9



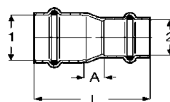
### Copper Elbow 45° FTG x P - Model 0626.1

Stock Code	Size	A (in)	A (mm)	L (in)	L (mm)	L1 (in)	L1 (mm)
	<b>1</b>						
16118	1/2"	0.311	7.9	1.059	26.9	1.098	27.9
16223	3/4"	0.433	11	1.339	34	1.374	34.9
16228	1"	0.551	14	1.457	37	1.492	37.9
16233	1-1/4"	0.685	17.4	1.709	43.4	1.787	45.4
16238	1-1/2"	0.823	20.9	2.240	56.9	2.319	58.9
16243	2"	1.059	26.9	2.634	66.9	2.709	68.8



### Bronze Union P x P - Model 0650

Stock Code	Size	A (in)	A (mm)	L (in)	L (mm)	G (in)
	<b>1 2</b>					
17598	1/2"	1.260	32	2.756	70	3/4"
17603	3/4"	1.335	33.9	3.146	79.9	1"
17608	1"	1.827	46.4	3.638	92.4	1-1/4"
17613	1-1/4"	1.634	41.5	3.681	93.5	1-1/2"
17618	1-1/2"	2.126	54	4.961	126	2"
17623	2"	2.067	52.5	5.217	132.5	2-1/2"



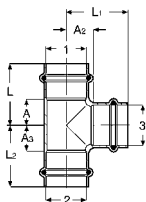
### Copper Reducer P x P - Model 0615.2

Stock Code	Size	A (in)	L (in)
	<b>1 2</b>		
23273	3/4" x 1/2"	0.445	2.071
23278	1" x 1/2"	0.736	2.362
23283	1" x 3/4"	0.504	2.287
23293	1-1/4" x 3/4"	0.728	2.638
23288	1-1/4" x 1"	0.614	2.524
23303	1-1/2" x 3/4"	0.994	3.327
23298	1-1/2" x 1"	0.768	3.071
23308	1-1/2" x 1-1/4"	0.528	2.959
23313	2" x 3/4"	1.524	4.016
15608	2" x 1"	1.319	3.780
22328	2" x 1-1/4"	0.827	3.425
78167	2" x 1-1/2"	0.846	3.827



# ProPressG 1/2" to 2"

## Dimensional documentation (inches)



## Copper Tee P x P x P - Model 0618

Stock Code	Size			A (in)	A (mm)	A2 (in)	A2 (mm)	A3 (in)	A3 (mm)	L (in)	L (mm)	L1 (in)	L1 (mm)	L2 (in)	L2 (mm)
	1	2	3												
16248	1/2"			0.492	12.5	0.059	12.7	0.492	12.5	1.496	38	1.248	31.7	1.496	38
16253	3/4"			0.591	15	0.069	15	0.591	15	1.752	44.5	1.496	38	1.752	44.5
16258	3/4" x 3/4" x 1/2"			0.433	11	0.063	16	0.433	11	1.594	40.5	1.378	35	1.594	40.5
16263	1"			0.709	18	0.074	20	0.709	18	1.870	47.5	1.693	43	1.870	47.5
23333	1" x 3/4" x 1/2"			0.685	17.4	0.787	20	0.885	22.5	1.594	40.5	1.535	39	1.791	45.5
17688	1" x 1" x 1/2"			0.433	11	0.787	20	0.433	11	1.594	40.5	1.535	39	1.594	40.5
16268	1" x 3/4" x 3/4"			0.591	15	0.069	19	1.043	26.5	1.752	44.5	1.654	42	1.949	49.5
16273	1" x 1" x 3/4"			0.591	15	0.069	19	0.591	15	1.752	44.5	1.654	42	1.752	44.5
16278	1-1/4"			1.024	26	0.081	22	1.024	26	2.047	52	1.890	48	2.047	52
16283	1-1/4" x 1-1/4" x 1"			0.886	22.5	0.075	23	0.886	22.5	1.909	48.5	1.811	46	1.909	48.5
16288	1-1/2"			1.142	29	0.101	29	1.142	29	2.559	65	2.559	65	2.559	65
23348	1/2" x 1-1/2" x 3/4"			0.669	17	1.141	29	0.669	17	2.086	53	2.086	52	2.086	53
16293	1-1/2" x 1-1/2" x 1"			0.748	19	0.085	30	0.748	19	2.165	55	2.087	53	2.165	55
16298	1-1/2" x 1-1/2" x 1-1/4"			0.866	22	0.090	29	0.866	22	2.283	58	2.165	55	2.283	58
16303	2"			1.378	35	0.116	35	1.378	35	2.953	75	2.953	75	2.953	75
23353	2" x 2" x 3/4"			0.799	20.3	1.259	32	0.799	20.3	2.374	60.3	2.165	55	2.374	60.3
16308	2" x 2" x 1-1/2"			1.142	29	0.107	35	1.142	29	2.717	69	2.795	71	2.717	69

## Notes

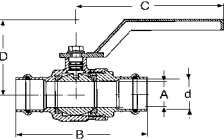
# Valves

## ProPress and ProPressG Valves

Dimensional documentation



Dimensional documentation (inches)

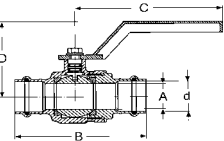


**Bronze ProPress Ball Valve - Metal Handle  
P x P Model 2970.1ZL**

Stock Code	Size d	A (in)	B (in)	C (in)	D (in)
79095	1/2"	0.551	3.346	4.331	2.402
79100	3/4"	0.787	3.819	4.331	2.461
79105	1"	0.984	4.291	4.823	2.795
79110	1-1/4"	1.260	4.685	4.823	3.228
79115	1-1/2"	1.575	5.610	5.315	3.661
79120	2"	1.969	6.756	5.315	3.976

**Bronze ProPress Ball Valve - Metal Handle  
P x P Model 2970.1**

Stock Code	Size d	A (in)	B (in)	C (in)	D (in)
22053	1/2"	0.551	3.346	4.331	2.402
22058	3/4"	0.787	3.819	4.331	2.461
22063	1"	0.984	4.291	4.823	2.795
22068	1-1/4"	1.260	4.685	4.823	3.228
22073	1-1/2"	1.575	5.610	5.315	3.661
22078	2"	1.969	6.756	5.315	3.976



**Bronze ProPress Ball Valve - Stainless Trim  
P x P Model 2970.3ZL**

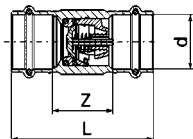
Stock Code	Size d	A (in)	B (in)	C (in)	D (in)
79820	1/2"	0.551	3.346	4.331	2.402
79825	3/4"	0.787	3.819	4.331	2.461
79830	1"	0.984	4.291	4.823	2.795
79835	1-1/4"	1.260	4.685	4.823	3.228
79840	1-1/2"	1.575	5.610	5.315	3.661
79845	2"	1.969	6.756	5.315	3.976

**Bronze ProPress Ball Valve - Stainless Trim  
P x P Model 2970.3**

Stock Code	Size d	A (in)	B (in)	C (in)	D (in)
22054	1/2"	0.551	3.346	4.331	2.402
22059	3/4"	0.787	3.819	4.331	2.461
22064	1"	0.984	4.291	4.823	2.795
22069	1-1/4"	1.260	4.685	4.823	3.228
22074	1-1/2"	1.575	5.610	5.315	3.661
22080	2"	1.969	6.756	5.315	3.976

# Valves

## Dimensional documentation (inches)



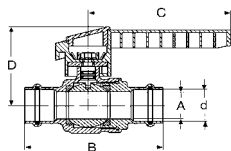
### Bronze Check Valve P x P Model 2974ZL

Stock Code	Size	Z (in)	L (in)
	d		
79035	1/2"	0.086	2.362
79040	3/4"	1.142	2.953
79045	1"	1.339	3.150
79050	1-1/4"	1.693	3.740
79055	1-1/2"	2.087	4.921
79060	2"	2.559	5.709

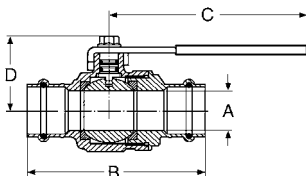
### Bronze Check Valve P x P Model 2974

Stock Code	Size	Z (in)	L (in)
	d		
22353	1/2"	0.086	2.362
22358	3/4"	1.142	2.953
22363	1"	1.339	3.150
22368	1-1/4"	1.693	3.740
22373	1-1/2"	2.087	4.921
22378	2"	2.559	5.709

### Bronze ProPress Ball Valve - Plastic Handle P x P Model 2970



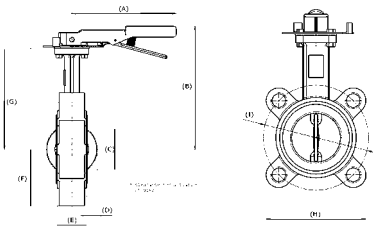
Stock Code	Size	A (in)	B (in)	C (in)	D (in)
	d				
22053	1/2"	0.551	3.346	4.331	2.402
22058	3/4"	0.787	3.819	4.331	2.461
22063	1"	0.984	4.291	4.823	2.795
22068	1-1/4"	1.260	4.685	4.823	3.228
22073	1-1/2"	1.575	5.610	5.315	3.661
22078	2"	1.969	6.756	5.315	3.976



### ProPressGas Ball Valve (Smart Connect feature) Model 0670

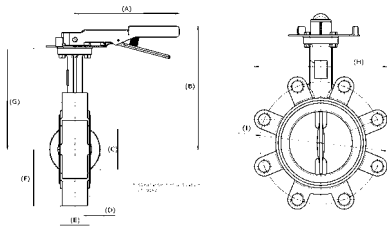
Stock Code	Size	A (in)	A (mm)	B (in)	B (mm)	C (in)	C (mm)	D (in)	D (mm)
19648	1/2"	0.55	14	3.70	94	4.76	121	1.54	39.2
19653	3/4"	0.79	20	4.06	103	4.76	121	1.61	41
19658	1"	0.98	25	4.35	110.5	4.76	121	1.76	44.7
19663	1-1/4"	1.12	28.5	4.49	114	6.10	155	2.18	55.3
19668	1-1/2"	1.50	38	5.53	140.5	6.10	155	2.47	62.8
19673	2"	1.85	47	6.46	164	6.10	155	2.72	69.2

Dimensional documentation (inches)



Butterfly Valve Model 2873.81

Stock Code	Size	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	H (in)	I (in)
	d									
22074	2-1/2"	6.496	7.401	2.165	0.433	1.811	2.637	5.354	5.196	5.511
22075	3"	6.496	7.637	2.795	0.669	1.811	2.819	5.590	7.007	5.984



Butterfly Valve Model 2873.81

Stock Code	Size	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	H (in)	I (in)
	d									
22076	4"	9.055	8.464	3.543	0.905	2.047	3.622	6.417	8.267	7.48

## Viega LLC Limited Warranty ProPress Fittings and Valves

Subject to the conditions and limitations in this Limited Warranty, Viega LLC (VIEGA) warrants to wholesalers and licensed plumbing and mechanical contractors in the United States and Canada that its PROPRESS fittings, when properly installed in non industrial and non marine applications and under normal conditions of use, will be free of failure from manufacturing defect for a period of fifty (50) years from date of installation and that its PROPRESS valves, when properly installed in non industrial and non marine applications and under normal conditions of use, will be free of failure from manufacturing defect for a period of two (2) years from date of installation.

Under this Limited Warranty, you only have a right to a remedy if the failure or leak resulted from a manufacturing defect in the products covered by this warranty and the failure or leak occurred during the warranty period. You do not have a remedy under this warranty and the warranty does not apply if the failure or any resulting damage is caused by (1) components other than those manufactured or sold by Viega; (2) not designing, installing, inspecting, or testing the ProPress fittings or valves in accordance with Viega's installation instructions in effect at the time of the installation; applicable code requirements; and accepted industry practice; (3) improper handling and protection of the product prior to and during installation, inadequate freeze protection, exposure to water pressures or temperatures or in applications outside acceptable operating conditions; (4) acts of nature such as, but not limited to, earthquakes, fire, flood, or lightning, or (5) external environmental causes, such as water quality variations, aggressive water, or other external chemical or physical conditions.

In the event of a leak or other failure of the parts covered by this warranty, it is the responsibility of the property owner to obtain and pay for repairs. Only if the warranty applies will Viega be responsible for the remedy under this warranty. The part or parts which

you claim failed should be kept and Viega contacted by writing to the address below or telephoning 1-800-976-9819 within thirty (30) days after the leak or other failure and identifying yourself as having a warranty claim. You should be prepared to ship, at your expense, the product which you claim failed due to a manufacturing defect and document the date of installation. Within a reasonable time after receiving the product, Viega will investigate the reasons for the failure, which includes the right to inspect the product at Viega. Viega will notify you in writing of the results of its review.

In the event that Viega determines that the failure or leak was the result of a manufacturing defect in the part covered by this warranty and that this warranty applies, the EXCLUSIVE AND ONLY REMEDY under this warranty shall be the reimbursement for repair and/or replacement of the part. VIEGA SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR OTHER DAMAGE (FOR EXAMPLE, WATER OR PROPERTY OR MOLD REMEDIATION) UNDER ANY LEGAL THEORY AND WHETHER ASSERTED BY DIRECT ACTION, FOR CONTRIBUTION OR INDEMNITY OR OTHERWISE.

THE ABOVE WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. If a limited warranty shall be found to apply, such warranty is limited to four years. Other than this Limited Warranty, Viega does not authorize any person or firm to create for it any other obligation or liability in connection with its products.

This Limited Warranty gives you specific legal rights and you also may have other rights which may vary from state to state. This warranty shall be interpreted and applied under the law of the state in which the product is installed and is intended as a Commercial Warranty.

*ProPress Warranty 0408*

## Viega

301 N. Main, 9th Floor  
Wichita, KS 67202  
Phone: 1-800-976-9819  
Fax: 1-800-976-9817  
[www.viega.com](http://www.viega.com)  
[insidesales@viega.com](mailto:insidesales@viega.com)

©2011, ProPress®, Smart Connect®, Viega®, XL®, and XL-C® are registered trademarks of Viega. ProPressG™, SmartLoop™ and Zero Lead™ are trademarks of Viega. RIDGID® is a registered trademark of Ridge Tool Company.

The Viega logo consists of the word "viega" in a bold, lowercase, sans-serif font, colored yellow. It is positioned on a black rectangular background. Below this black rectangle is a solid yellow rectangular bar.

**viega**