

# Viega ProPress® and ProPressG™ Systems Pocket Guide



**viega**

# ProPress and ProPressG Systems

Welcome to Viega...

The global leader in plumbing and heating systems.



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

When Franz-Anselm Viegeler 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**

Smart Connect feature . . . . .	4
System data sheet . . . . .	6
Product instructions . . . . .	7
Minimum clearance between Viega press connections . . . . .	10
Tubing insertion depth . . . . .	10
Friction loss allowances . . . . .	11
Approved applications . . . . .	12
Sealing element descriptions . . . . .	13
FAQs . . . . .	14

### **ProPress**

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

### **ProPress XL (Bronze)**

2-1/2" to 4" dimensional documentation . . . . .	31
--	----

### **ProPress XL-C (Copper)**

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

### **ProPressG**

1/2" to 2" dimensional documentation . . . . .	39
--	----

### **Warranty**

Viega limited warranty (covers ProPress fittings) . . . . .	44
---	----

## ProPress and ProPressG System

### ProPress and ProPressG Fittings with Smart Connect<sup>®</sup> feature...



### ...Look for the green and yellow dots.

Green and yellow dots identify the patented Smart Connect feature, which quickly identifies unpressed fittings. Green dots allow liquids and gases to pass by the sealing element during pressure testing. Yellow dots allow air to pass by the sealing element during pressure testing.

Only ProPress fittings offer the Smart Connect feature.

The ProPress System consists of a series of engineered copper and bronze press fittings offered in hundreds of configurations and sizes ranging from 1/2" to 4".

The ProPressG System is offered in sizes ranging from 1/2" to 2".

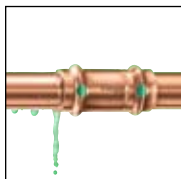
Fittings are offered with different sealing elements that meet a broad range of piping applications. Traditional ProPress fittings use a shiny black, high performance EPDM seal. Users can also buy a dull black FKM seal separately and install it manually into 1/2" to 2" and XL (Bronze) 2-1/2" to 4" fittings only.

ProPressG fittings use a yellow, high performance HNBR seal.

Selection of appropriate seals and fittings is the responsibility of the system designer and/or installer. Please contact Viega for technical guidance.



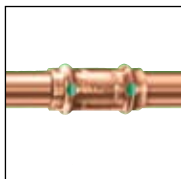
Whether you are using ProPress (green Smart Connect dots) or ProPressG (yellow dots) both systems can be pressed in the same manner with the same tools.



**1** Identify an unpressed connection during pressure testing when water flows past the sealing element.



**2** Upon identification, the ProPress tool is used to press the fitting, making a permanent, leak-proof connection.



**3** ProPress connections are fast, flameless and reliable.

## System data sheet

### System description

ProPress, ProPress XL (bronze) and ProPress XL-C (copper) are safe, reliable and economical copper pipe installation 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

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°

RIDGID® Pressing Tools			
Model	330-C	330-B	100-B
Volts	120v	18v Battery	14.4v Battery
Amps	5.A	27.2A	24A
Weight (w/out jaw)	9 lbs	10 lbs	7

### Tools

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

RIDGID offers four pressing tools for connecting ProPress fittings.

- RP210-B Battery powered Tool (1/2" to 1-1/4")
- RP330-C Corded Tool (1/2" to 4")
- RP330-B Battery powered Tool (1/2" to 4")
- 100-B Battery powered Tool (1/2" to 1")
- 1/2" to 4" fittings are pressed in 4-7 sec.

RIDGID is a registered trademark of Ridgid Tool Co.

### Approvals and certificates NSF International

[www.nsf.org/business/search\\_listings/index.asp#mname](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/typeapproval/contents.html> (enter "Viega")

### CSA International

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

### FM

### International approvals

- Deutsch Veiein des Gas-und Wasserfachese.V. (DVGW)
- Lloyd's Register (LLOYD'S)
- Det Norske Veitas (DNV)
- Registro Italiano Navale (RINA)
- Bureau Veitas (BV)
- KWA

### Compliant with

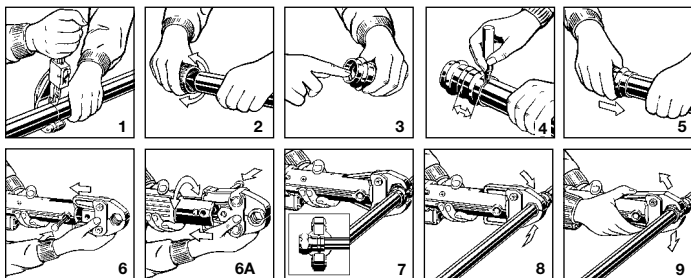
- ICC International Plumbing Code
- UPC Uniform Plumbing Code
- PHCC National standard plumbing code
- Florida Building Code, Volume II Plumbing Code
- NFPA 13, 13D and 13R

Contact your local Viega representative for details on local approvals.

## 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 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.



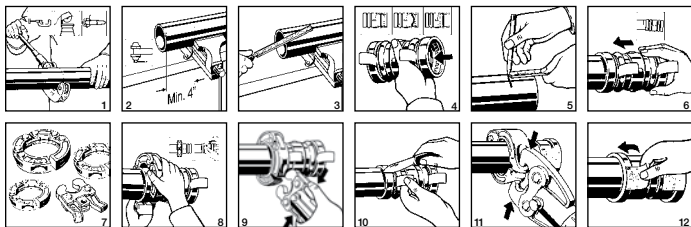
**Pressure Testing:** Pressure testing is to be carried out in accordance with local codes. ProPress includes the Smart Connect Feature providing quick and easy identification of **unpressed** connections during the pressure testing process. **Unpressed connections are located by pressurizing the system 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 Connection feature is removed during the pressing process creating a leak-proof, permanent connection.

# ProPress XL (Bronze) System

## Product instructions

### Copper fittings for types K, L and M hard copper tubing in 2-1/2" to 4"

**WARNING** Read and understand 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.

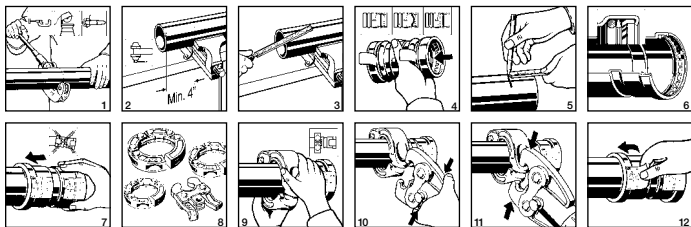
**Pressure Testing:** Pressure testing is to be carried out in accordance with local codes. ProPress includes the Smart Connect feature providing quick and easy identification of **unpressed** connections during the pressure testing process. **Unpressed connections are located by pressurizing the system 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.



## Product instructions

### Copper fittings for types K, L and M hard copper tubing in 2-1/2" to 4"

**WARNING** Read and understand 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 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.

## 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"

## Tubing insertion depth

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"

## Friction loss allowances

### Approximate Friction Loss Allowances for ProPress Fittings in feet of straight tube

The tables below express friction loss in ProPress fittings as equivalent lengths of tube, in feet. For example, a 3/4" 90° elbow would impose the same friction loss as 1 foot of 3/4" copper tube.

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				

Notes: 1. The friction losses shown are approximations.

All fittings actual numbers are equal to or less than these numbers.

2. The numbers in these tables are equivalent to friction losses by solder fittings as defined by tests conducted at Harvard University (1948).

# ProPress and ProPressG Application Guidelines

## Approved applications

Type of Service	System Operating Conditions	Specialty Seals Factory Installed	Specialty Seals Field Installed	Specialty Seals Factory Installed
		ProPress w/EPDM Color-Shiny Black	FKM Color-Dull Black*	ProPressG w/HNBR Color-Yellow*
<b>Fluids</b>				
Hot and Cold Potable Water	32°F – 250°F, max. 200 psi	YES	NO	NO
Potable Water System Flushing	Compliant with major plumbing codes	YES	NO	NO
Chilled Water with corrosion inhibitors	0°F – 250°F, max. 200 psi Ethylene Glycol – 50% max. con. Propylene Glycol – 50% max. con.	YES	NO	YES
Hydronic Heating	0°F – 250°F, max. 200 psi Ethylene Glycol – 50% max. con. Propylene Glycol – 50% max. con.	YES	NO	YES
Low Pressure Steam	Max 15 psi	NO	NO	YES
Rainwater/Greywater	32°F – 250°F, max. 200 psi	YES	YES	YES
Fire Sprinkler	32°F – 250°F, max. 175 psi	YES	NO	NO
Heating Fuel Oil	-40°F – 180°F Ambient, max. 125 psi	NO	YES	NO
Diesel Fuel	Compliant with NFPA 30 and 30A	NO	YES	NO
<b>Process Piping</b>				
Propylene Glycol	0°F – 250°F, 200 psi 100% max. concentration	YES	NO	YES
Ethylene Glycol	0°F – 250°F, 200 psi 100% max. concentration	YES	NO	YES
Butylene Glycol	0°F – 250°F, 200 psi 100% max. concentration	YES	NO	YES
Pure Grain Alcohol		NO	NO	NO
Liquid Nitrogen		NO	NO	NO
<b>Gases</b>				
Compressed Air with less than 25mg/m <sup>3</sup> oil content	0°F – 160°F Ambient, max. 200 psi	YES	YES	YES
Compressed Air with more than 25mg/m <sup>3</sup> oil content	0°F – 160°F Ambient, max. 200 psi	NO	YES	YES
Carbon Dioxide CO <sub>2</sub> dry	0°F – 250°F Ambient, max. 140 psi	YES	NO	NO
Nitrogen N <sub>2</sub>	0°F – 250°F Ambient, max. 140 psi	YES	NO	NO
Argon	0°F – 250°F Ambient, max. 140 psi	YES	NO	NO
Corgon	0°F – 250°F Ambient, max. 140 psi	YES	NO	NO
Argonmac - K (welding gas)	0°F – 250°F Ambient, max. 140 psi	YES	NO	NO
Vacuum	Max. 29.2 inches of Mercury	YES	NO	YES
Natural Gas, Liquid Propane Gas, Mixed Fuel Gases, Manufactured Fuel Gases, Liquid Butane Gas	-40°F – 180°F Ambient, max. 125 psi	NO	YES	NO
Oxygen O <sub>2</sub> (non-medical)	0°F – 160°F Ambient, max. 160 psi	YES	YES	NO

\*Notes: FKM sealing elements not compatible with XL-C fittings.

**Warning:** 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. Consult the Viega Technical Support Department for information on applications not listed and applications outside the temperature and pressure ranges listed above.

## 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, gloss black in color

**Maximum Pressure:** 200 psi

**Operating temperature:**

0°F to 250°F  
(or higher, for brief periods)

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, environmental influences such as ozone, sunlight and weathering, 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 suitable for food contact applications and 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 FKM 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 320°F  
(or higher, for brief periods)

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, environmental influences such as ozone, sunlight and weathering, 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 or 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 (e.g. 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 in 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 is the procedure for soldering near a ProPress connection?

**A** Stay at least three tubing diameters away from the press connection. If three tubing diameters is not possible, installer should take proper precautions to keep the ProPress joint cool while soldering.

- Wrap the joint with a cold wet rag.
- Fabricate solder joint prior to installing the press fitting making sure tubing is cooled before installing fitting.
- Use "spray type" spot freezing product.

**Q** As an inspector, how do I know if I am looking at a good joint?

**A** Pressure test, same as a solder joint.

**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 against 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.

**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 is caused by ProPress fittings and will it cause premature wear in copper tubing?

**A** The long radius of ProPress elbows reduces the turbulence typically experienced with traditional short radius fittings. Not reaming the ID of the tubing is the largest contributing factor to turbulence and premature wear of any piping system and would be a concern in any cooper joining system.

## Frequently Asked Questions

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

**A** Yes. ProPress can be used underground, but users must obtain approval from the authority having jurisdiction.

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

**A** This is not a recommended practice and constitutes improper use of the product. 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 fittings. Flow rates and flow rate calculations are the same as those used for solder fitting installations.

**Q** What if a user presses a fitting that does not contain a seal?

**A** A fitting should never be installed without a seal.

**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.
- The pressing jaws were not properly aligned over the fitting.

With the first situation, confirm tubing is properly installed and press. It is not necessary to drain the system to do so. In the second and third situation, the user must cut out the fitting and re-install properly.

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

**A** Yes. However, it is recommended that you contact your local District Manager or Viega Tech Support for consultation.

**Q** Is an OD deburr required if I use a displacement-type cutter wheel?

**A** Yes, deburring is required to prevent cutting the sealing element.





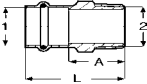
# ProPress

1/2" to 2" fittings

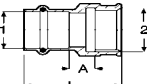
Dimensional documentation



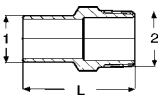
## Dimensional documentation (inches)

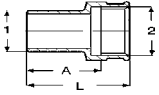
Adapter C x M					
	Stock Code	Size (1 x 2)	Material	(A)	(L)
	77812	1/2" x 3/8" NPT	Bronze	0.96	1.713
	77817	1/2" x 1/2" NPT	Bronze	1.12	1.870
	77822	1/2" x 3/4" NPT	Bronze	1.22	1.969
	77827	3/4" x 1/2" NPT	Bronze	1.18	2.087
	77832	3/4" x 3/4" NPT	Bronze	1.18	2.087
	22348	3/4" x 1" NPT	Bronze	1.42	2.323
	77837	1" x 3/4" NPT	Bronze	1.32	2.224
	77842	1" x 1" NPT	Bronze	1.46	2.362
	77847	1" x 1-1/4" NPT	Bronze	1.73	2.638
	77852	1-1/4" x 1" NPT	Bronze	1.42	2.441
	77857	1-1/4" x 1-1/4" NPT	Bronze	1.54	2.559
	77862	1-1/4" x 1-1/2" NPT	Bronze	1.65	2.677
	77867	1-1/2" x 1-1/4" NPT	Bronze	1.54	2.953
	77872	1-1/2" x 1-1/2" NPT	Bronze	1.54	2.953
	22343	1-1/2" x 2" NPT	Bronze	1.83	3.248
	22339	2" x 1-1/2" NPT	Bronze	1.67	3.248
	77877	2" x 2" NPT	Bronze	1.67	3.248

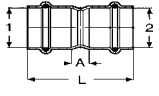
  

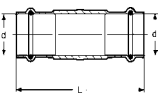
Adapter C x F					
	Stock Code	Size (1 x 2)	Material	(A)	(L)
	77887	1/2" x 3/8" NPT	Bronze	0.224	1.378
	77892	1/2" x 1/2" NPT	Bronze	0.291	1.575
	77897	1/2" x 3/4" NPT	Bronze	0.394	1.693
	77902	3/4" x 1/2" NPT	Bronze	0.331	1.772
	77907	3/4" x 3/4" NPT	Bronze	0.394	1.850
	14548	3/4" x 1" NPT	Bronze	0.252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

## Dimensional documentation (inches)

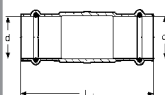
Adapter FTG x M					
	Stock Code	Size (1 x 2)	Material	(L)	
	77957	1/2" x 3/8" NPT	Bronze	1.732	
	77962	1/2" x 1/2" NPT	Bronze	1.969	
	77967	1/2" x 3/4" NPT	Bronze	2.047	
	77982	3/4" x 1/2" NPT	Bronze	2.028	
	77977	3/4" x 3/4" NPT	Bronze	2.146	
	14553	1" x 3/4" NPT	Bronze	2.146	
	77982	1" x 1" NPT	Bronze	2.362	
	77987	1-1/4" x 1-1/4" NPT	Bronze	2.657	
	77992	1-1/2" x 1-1/2" NPT	Bronze	3.051	
	77997	2" x 2" NPT	Bronze	3.543	

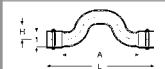
Adapter FTG x F					
	Stock Code	Size (1 x 2)	Material	(A)	(L)
	78002	1/2" x 3/8" NPT	Bronze	1.031	1.437
	78007	1/2" x 1/2" NPT	Bronze	1.118	1.654
	78012	1/2" x 3/4" NPT	Bronze	1.181	1.732
	78017	3/4" x 1/2" NPT	Bronze	1.217	1.752
	78022	3/4" x 3/4" NPT	Bronze	1.256	1.811
	22218	1" x 1/2" NPT	Bronze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

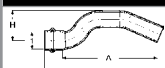
Coupling C x C with Stop					
	Stock Code	Size (1 & 2)	Material	(A)	(L)
	78047	1/2"	Copper	0.236	1.732
	78052	3/4"	Copper	0.394	2.205
	78057	1"	Copper	0.394	2.205
	78062	1-1/4"	Copper	0.394	2.441
	78067	1-1/2"	Copper	0.394	3.307
	78072	2"	Copper	0.472	3.622

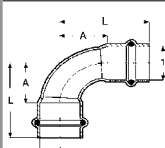
Coupling C x C No Stop					
	Stock Code	Size (d)	Material	(L)	
	78172	1/2"	Copper	1.732	
	78177	3/4"	Copper	2.205	
	78182	1"	Copper	2.205	
	78187	1-1/4"	Copper	2.441	
	78192	1-1/2"	Copper	3.307	
	78197	2"	Copper	3.622	

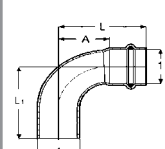
## Dimensional documentation (inches)

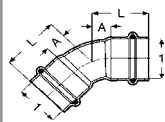
Coupling C x C Extended No Stop				
	Stock Code	Size d	Material	(L)
	78213	1/2"	Copper	2.9
	78218	3/4"	Copper	3.3
	78223	1"	Copper	3.7
	78228	1-1/4"	Copper	4.1
	78233	1-1/2"	Copper	4.7
	78238	2"	Copper	5.2

Cross-Over C x C						
	Stock Code	Size (1)	Material	(A)	(L)	(H)
	77742	1/2"	Copper	3.622	5.118	0.772
	77747	3/4"	Copper	4.488	6.339	0.902

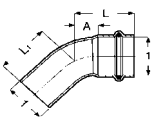
Cross-Over FTG x C Close Rough						
	Stock Code	Size (1)	Material	(A)	(L)	(H)
	78137	1/2"	Copper	3.835	4.583	1.098
	78142	3/4"	Copper	4.638	5.543	1.539


Elbow 90° C x C Close Rough					
	Stock Code	Size (1)	Material	(A)	(L)
	77317	1/2"	Copper	0.748	1.496
	77322	3/4"	Copper	1.039	1.945
	77327	1"	Copper	1.323	2.228
	77332	1-1/4"	Copper	1.654	2.677
	77337	1-1/2"	Copper	1.984	3.402
	77342	2"	Copper	2.551	4.126

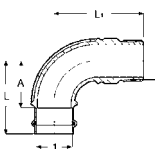
Elbow 90° FTG x C Close Rough						
	Stock Code	Size (1)	Material	(A)	(L)	(L1)
	77347	1/2"	Copper	0.748	1.496	1.535
	77352	3/4"	Copper	1.039	1.945	1.984
	77357	1"	Copper	1.323	2.228	2.268
	77362	1-1/4"	Copper	1.365	2.677	2.756
	77367	1-1/2"	Copper	1.984	3.402	3.480
	77372	2"	Copper	2.551	4.126	4.205

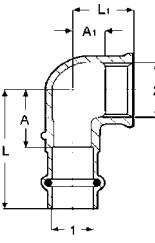
Elbow 45° C x C					
	Stock Code	Size (1)	Material	(A)	(L)
	77607	1/2"	Copper	0.295	1.043
	77612	3/4"	Copper	0.433	1.339
	77617	1"	Copper	0.551	1.457
	77622	1-1/4"	Copper	0.685	1.709
	77627	1-1/2"	Copper	0.823	2.240
	77632	2"	Copper	1.059	2.634

## Dimensional documentation (inches)

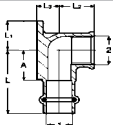
Elbow 45° FTG x C						
	Stock Code	Size (1)	Material	(A)	(L)	(L1)
	77637	1/2"	Copper	0.311	1.059	1.098
	77642	3/4"	Copper	0.433	1.339	1.374
	77647	1"	Copper	0.551	1.457	1.492
	77652	1-1/4"	Copper	0.685	1.709	1.787
	77657	1-1/2"	Copper	0.823	2.240	2.319
	77662	2"	Copper	1.059	2.634	2.709

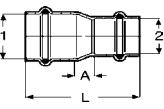
Elbow 90° FTG x F						
	Stock Code	Size (1 & 2)	Material	(A)	(L)	(L1)
	77577	1/2" NPT	Bronze	0.331	2.008	0.866

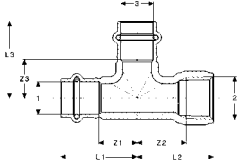
Elbow 90° C x M						
	Stock Code	Size (1 x 2)	Material	(A)	(L)	(L1)
	77492	1/2" x 1/2" NPT	Bronze	0.945	1.693	1.890
	77497	1/2" x 3/4" NPT	Bronze	0.945	1.693	2.047
	77502	3/4" x 1/2" NPT	Bronze	0.984	1.890	1.870
	77507	3/4" x 3/4" NPT	Bronze	1.102	2.008	2.323
	77512	1" x 1" NPT	Bronze	1.382	2.287	2.835
	77517	1-1/4" x 1-1/4" NPT	Bronze	1.870	2.894	3.465
	77522	1-1/4" x 1-1/2" NPT	Bronze	2.205	3.622	3.839
	77527	2" x 2" NPT	Bronze	2.756	4.331	4.724

Elbow 90° C x F							
	Stock Code	Size (1 x 2)	Material	(A)	(A1)	(L)	(L1)
	22193	1/2" x 3/8"	Bronze	0.945	0.295	1.693	0.728
	77532	1/2" x 1/2"	Bronze	0.984	0.331	1.732	0.866
	77537	1/2" x 3/4"	Bronze	1.142	0.409	1.890	0.965
	77542	3/4" x 3/4"	Bronze	1.150	0.488	2.055	1.043
	77547	3/4" x 1/2"	Bronze	1.142	0.472	2.047	1.004
	22203	1" x 1/2"	Bronze	1.299	0.709	2.205	1.260
	77552	1" x 1"	Bronze	1.417	0.618	2.323	1.280
	22198	1-1/4" x 1/2"	Bronze	1.260	0.728	2.283	1.260
	77557	1-1/4" x 1-1/4"	Bronze	1.575	0.841	2.598	1.516
	77562	1-1/2" x 1-1/2"	Bronze	1.614	1.012	3.031	1.693
	77567	2" x 2"	Bronze	2.244	1.469	3.819	2.165

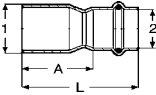
## Dimensional documentation (inches)

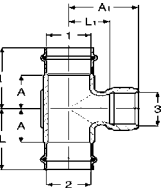
Elbow Drop 90° C x F with Wall Plate									
	Stock Code	Size (1 & 2)	Material	(L)	(L1)	(L2)	(L3)	(A)	
	22223	1/2" x 3/8"	Bronze	1.77	0.83	0.51	0.73	1.02	
	72481	1" NPT	Bronze	2.36	0.98	0.87	1.26	1.46	
	77697	1/2"	Bronze	1.732	0.835	0.866	0.512	0.984	
	77702	3/4"	Bronze	2.047	1.181	1.122	0.835	1.142	

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

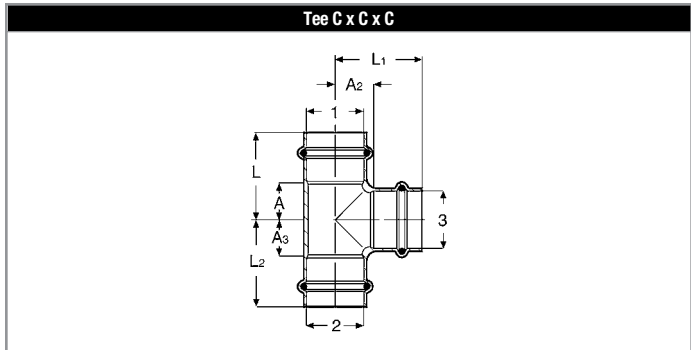
Tee C x F x C									
									
Stock Code	Size (1 x 2 x 3)	Material	Z1 (in)	Z2 (in)	Z3L (in)	L1 (in)	L2 (in)	L3 (in)	WS (in)
77583	1/2" x 1/2" NPT x 1/2"	Bronze	0.75	0.96	0.75	1.50	1.50	1.50	0.98
77593	3/4" x 1/2" NPT x 3/4"	Bronze	0.94	0.96	0.94	1.85	1.50	1.85	0.98
77588	3/4" x 3/4" NPT x 3/4"	Bronze	1.94	1.14	0.94	1.85	1.69	1.85	1.22
77598	1" x 3/4" NPT x 1"	Bronze	1.14	1.08	1.14	2.05	1.77	2.05	1.22
77603	1-1/4" x 3/4" NPT x	1-1/4"	Bronze	1.26	1.20	1.26	2.28	1.89	1.22
2.28	77608	1-1/2" x 3/4"	NPT x	1-1/2"	Bronze	1.34	1.36	1.34	1.22
2.76	2.05	2.76	77613	2" x	3/4"	x 2"	Bronze	1.69	1.22

## Dimensional documentation (inches)

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

Tee C x C x F							
	Stock Code	Size (1 x 2 x 3)	Material	(A)	(A1)	(L)	(L1)
	77582	1/2" x 1/2" x 1/2"	Bronze	0.945	1.339	1.693	0.803
	14563	3/4" x 3/4" x 1/4"	Bronze	0.768	1.378	1.673	0.928
	77587	3/4" x 3/4" x 1/2"	Bronze	1.004	1.673	1.909	1.138
	77592	1" x 1" x 1/2"	Bronze	1.004	1.772	1.909	1.236
	15623	1" x 1" x 3/4"	Bronze	1.161	1.969	2.067	1.343
	77597	1-1/4" x 1-1/4" x 1/2"	Bronze	0.886	1.929	1.909	1.323
	15618	1-1/4" x 1-1/4" x 3/4"	Bronze	0.945	1.929	1.969	1.303
	78342	1-1/2" x 1-1/2" x 1/2"	Bronze	0.748	1.969	2.165	1.433
	15613	1-1/2" x 1-1/2" x 3/4"	Bronze	0.886	2.087	2.303	1.461
	77602	2" x 2" x 1/2"	Bronze	0.984	2.165	2.559	1.630
	14558	2" x 2" x 3/4"	Bronze	1.083	2.363	2.657	1.736

## Dimensional documentation (inches)



Stock Code	Size (1 x 2 x 3)	Material	(A)	(A2)	(A3)	(L)	(L1)	(L2)
77377	1/2" x 1/2" x 1/2"	Copper	0.738	0.498	0.738	1.496	1.443	1.496
77382	1/2" x 1/2" x 3/4"	Copper	0.906	0.591	0.906	1.654	1.496	1.654
15493	1/2" x 1/2" x 1"	Copper	1.102	0.551	1.102	1.850	1.457	1.850
77387	3/4" x 3/4" x 3/4"	Copper	0.837	0.591	0.837	1.752	1.496	1.752
77392	3/4" x 1/2" x 1/2"	Copper	0.687	0.630	0.984	1.594	1.378	1.732
77397	3/4" x 1/2" x 3/4"	Copper	0.844	0.591	1.142	1.752	1.496	1.890
77402	3/4" x 3/4" x 1/2"	Copper	0.687	0.630	0.687	1.594	1.378	1.594
77407	3/4" x 3/4" x 1"	Copper	0.965	0.630	0.965	1.870	1.535	1.870
77412	1" x 1" x 1"	Copper	0.955	0.787	0.955	1.870	1.693	1.870
22263	1" x 1/2" x 3/4"	Copper	0.846	0.748	1.240	1.752	1.654	1.988
94767	1" x 1/2" x 1"	Copper	0.978	0.787	1.516	1.870	1.693	2.264
77417	1" x 3/4" x 1/2"	Copper	0.703	0.787	0.886	1.594	1.535	1.791
77422	1" x 3/4" x 3/4"	Copper	0.837	0.748	1.043	1.752	1.654	1.949
77427	1" x 3/4" x 1"	Copper	0.709	0.787	1.161	1.870	1.693	2.067
77432	1" x 1" x 1/2"	Copper	0.689	0.787	0.689	1.594	1.535	1.594
77437	1" x 1" x 3/4"	Copper	0.844	0.748	0.844	1.752	1.654	1.752
15488	1" x 1" x 1-1/4"	Copper	1.161	0.837	1.161	2.067	1.870	2.067
77442	1-1/4" x 1-1/4" x 1-1/4"	Copper	1.024	0.866	1.024	2.047	1.890	2.047
22253	1-1/4" x 1/2" x 1-1/4"	Copper	1.024	0.866	1.772	2.047	1.890	2.520
22243	1-1/4" x 3/4" x 1/2"	Copper	0.650	0.925	1.122	1.673	1.673	2.028
22258	1-1/4" x 3/4" x 3/4"	Copper	0.768	0.866	1.299	1.791	1.772	2.205
22268	1-1/4" x 3/4" x 1"	Copper	0.886	0.906	1.398	1.929	1.811	2.303
22248	1-1/4" x 3/4" x 1-1/4"	Copper	1.024	0.866	1.535	2.047	1.890	2.441
22238	1-1/4" x 1" x 1/2"	Copper	0.650	0.925	0.906	1.673	1.673	1.811
94762	1-1/4" x 1" x 3/4"	Copper	0.768	0.866	1.142	1.791	1.772	2.047

Continued on next page



## Dimensional documentation (inches)

Tee C x C x C (Continued from previous page)								
Stock Code	Size (1 x 2 x 3)	Material	(A)	(A2)	(A3)	(L)	(L1)	(L2)
14568	1-1/4" x 1" x 1"	Copper	0.886	0.906	1.280	1.909	1.811	2.185
94757	1-1/4" x 1-1/4" x 1/2"	Copper	0.650	0.925"	0.650	1.673	1.673	1.673
77452	1-1/4" x 1-1/4" x 3/4"	Copper	0.768	0.866	0.768	1.791	1.772	1.791
77447	1-1/4" x 1-1/4" x 1"	Copper	0.88	0.906	0.886	1.909	1.811	1.909
77457	1-1/2" x 1-1/2" x 1-1/2"	Copper	1.142	1.14	1.142	2.559	2.559	2.559
15478	1-1/2" x 3/4" x 3/4"	Bronze	0.906	1.299	1.299	2.323	2.205	2.205
15473	1-1/2" x 1/2" x 1-1/2"	Bronze	1.240	1.240	1.417	2.657	2.657	2.165
15468	1-1/2" x 1" x 3/4"	Bronze	0.906	1.299	1.063	2.323	2.205	1.969
15458	1-1/2" x 1" x 1"	Copper	0.738	1.063	1.535	2.165	1.969	2.441
15463	1-1/2" x 1" x 1-1/2"	Copper	1.132	1.132	1.831	2.559	2.559	2.736
22233	1-1/2" x 1-1/4" x 3/4"	Copper	0.669	1.142	1.083	2.087	2.047	2.106
15453	1-1/2" x 1-1/4" x 1"	Copper	0.738	1.181	1.289	2.165	2.087	2.323
15483	1-1/2" x 1-1/4" x 1-1/4"	Copper	0.866	1.142	1.339	2.283	2.165	2.362
15448	1-1/2" x 1-1/2" x 1/2"	Copper	0.463	1.102	0.463	1.890	1.850	1.890
77462	1-1/2" x 1-1/2" x 3/4"	Copper	0.669	1.142	0.669	2.087	2.047	2.087
77467	1-1/2" x 1-1/2" x 1"	Copper	0.748	1.181	0.748	2.165	2.087	2.165
77472	1-1/2" x 1-1/2" x 1-1/4"	Copper	0.866	1.142	0.866	2.283	2.165	2.283
77477	2" x 2" x 2"	Copper	1.378	1.378	1.378	2.953	2.953	2.953
15533	2" x 1/2" x 2"	Copper	1.772	1.772	1.535	3.346	3.346	2.283
15523	2" x 1" x 2"	Bronze	1.220	3.465	1.732	2.795	2.638	2.638
15528	2" x 1" x 2"	Bronze	1.772	1.772	2.244	3.346	3.346	3.150
15518	2" x 1-1/4" x 1-1/4"	Copper	0.935	1.329	1.841	2.520	2.362	2.874
15498	2" x 1-1/2" x 1"	Copper	0.817	1.378	1.447	2.402	2.283	2.874
15513	2" x 1-1/2" x 3/4"	Copper	0.709	1.378	1.260	2.283	2.283	2.677
15508	2" x 1-1/2" x 1-1/4"	Copper	0.935	1.486	1.545	2.520	2.520	2.972
15503	2" x 1-1/2" x 2"	Copper	1.142	1.378	1.654	2.717	2.795	3.071
22228	2" x 2" x 1/2"	Bronze	1.378	1.378	1.890	2.953	2.953	3.327
15538	2" x 2" x 3/4"	Copper	0.541	1.299	0.541	2.126	2.047	2.126
94777	2" x 2" x 3/4"	Copper	0.797	1.260	0.797	2.372	2.165	2.372
94772	2" x 2" x 1"	Copper	0.915	1.299	0.915	2.490	2.205	2.490
77487	2" x 2" x 1-1/4"	Copper	1.043	1.378	1.043	2.618	2.402	2.618
77482	2" x 2" x 1-1/2"	Copper	1.142	1.378	1.142	2.717	2.795	2.717

## Dimensional documentation (inches)

Union C x C						
	Stock Code	Size (1 & 2)	Material	(A)	(L)	(G)
	77667	1/2"	Bronze	1.260	2.756	3/4"
	77672	3/4"	Bronze	1.335	3.146	1"
	77677	1"	Bronze	1.827	3.628	1-1/4"
	77682	1-1/4"	Bronze	1.634	3.681	1-1/2"
	77687	1-1/2"	Bronze	2.126	4.961	2"
	77692	2"	Bronze	2.067	5.217	2-1/2"

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

Di-electric Union C x F						
	Stock Code	Size (1 & 2)	Material	(A)	(L)	(G)
	15558	1/2"	Bronze	0.961	2.244	1-1/4"
	15568	3/4"	Bronze	1.110	2.571	1-1/2"
	15553	1"	Bronze	1.004	2.571	1-1/2"
	15548	1-1/4"	Bronze	0.972	2.677	2"
	15543	1-1/2"	Bronze	1.004	3.102	2-1/4"
	15563	2"	Bronze	1.260	3.531	2-3/4"

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

Cap C					
	Stock Code	Size (d)	Material	(L)	(D)
	77712	1/2"	Copper	0.917	0.799
	77717	3/4"	Copper	1.067	0.945
	77722	1"	Copper	1.110	0.992
	77727	1-1/4"	Copper	1.319	1.201
	77732	1-1/2"	Copper	1.622	1.465
	77737	2"	Copper	1.811	1.677

## Dimensional documentation (inches)

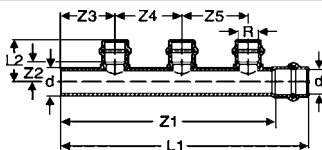
Adapter Flange C x Flange (old version)									
Stock Code	Size (d1)	Material	(L)	(Z)	(b)	(d2)	(D)	(K)	
93397	1"	Bronze	2.402	1.496	0.394	0.630	4.252	3.110	
93402	1-1/4"	Bronze	2.421	1.398	0.413	0.630	4.626	3.504	
93407	1-1/2"	Bronze	2.697	1.280	0.453	0.630	5.000	3.858	
93412	2"	Bronze	3.346	1.772	0.512	0.748	6.004	4.764	

Adapter Flange C x Flange (new version)									
Stock Code	Size (d1)	Material	(L)	(Z)	(b1)	(d2)	(D)	(K)	(d2)
19708	1"	Bronze	2.756	1.850	0.630	0.827	4.331	3.110	0.630
19713	1-1/4"	Bronze	2.756	1.850	0.630	0.827	4.528	3.504	0.630
19718	1-1/2"	Bronze	3.071	1.654	0.630	0.827	4.921	3.858	0.630
19723	2"	Bronze	3.661	2.087	0.630	0.827	5.906	4.764	0.748

PureFlow/ProPress Adapter PEX x C					
Stock Code	Size (d x d1)	Material	(L)	(Z)	
67620	1/2" x 1/2"	Bronze	1.57	0.236	
67626	1/2" x 3/4"	Bronze	1.831	0.335	
67627	5/8" x 1/2"	Bronze	1.496	0.157	
67628	5/8" x 3/4"	Bronze	1.831	0.335	
67630	3/4" x 1/2"	Bronze	1.417	0.079	
67640	3/4" x 3/4"	Bronze	1.732	0.236	
67660	1" x 1"	Bronze	1.969	0.315	

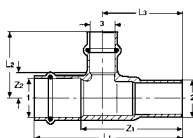
## Dimensional documentation (inches)

### ProPress Manifold 3-Outlets (open) C x FTG x C



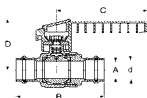
Stock Code	Size (d x R)	Material	(L1)	(L2)	(Z1)	(Z2)	(Z3)	(Z4)	(Z5)
65803	1" x 1/2"	Copper	7.323	1.512	6.378	0.773	1.654	1.969	1.969

### ProPress Manifold 1-Outlet (open) C x FTG x C



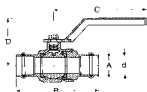
Stock Code	Size (1 x 2 x 3)	Material	(Z1)	(Z2)	(L1)	(L2)	(L3)
65801	1" x 1" x 1/2"	Copper	2.500	0.787	3.661	1.535	2.067

### ProPress Ball Valve — Plastic Handle C x C



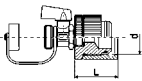
Stock Code	Size (d)	Material	(A)	(B)	(C)	(D)
19678	1/2"	Bronze	0.551	3.346	3.858	2.539
19683	3/4"	Bronze	0.787	3.819	3.858	2.618
19688	1"	Bronze	0.984	4.291	4.429	2.795
19693	1-1/4"	Bronze	1.260	4.685	4.429	3.228
19698	1-1/2"	Bronze	1.575	5.610	4.685	3.346
19703	2"	Bronze	1.969	6.756	4.685	3.661

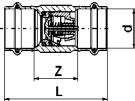
### ProPress Ball Valve — Metal Handle C x C

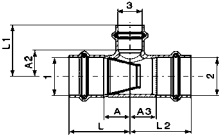


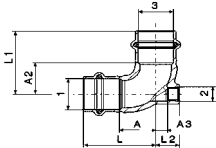
Stock Code	Size (d)	Material	(A)	(B)	(C)	(D)
22053	1/2"	Bronze	0.551	3.346	4.331	2.402
22058	3/4"	Bronze	0.787	3.819	4.331	2.461
22063	1"	Bronze	0.984	4.291	4.823	2.795
22068	1-1/4"	Bronze	1.260	4.685	4.823	3.228
22073	1-1/2"	Bronze	1.575	5.610	5.315	3.661
22078	2"	Bronze	1.969	6.756	5.315	3.976

## Dimensional documentation (inches)

Bronze Pressure Test Plug				
	Stock Code	Size (d)	Material	(L)
	78202	1/2"	Bronze	1.654
	78207	3/4"	Bronze	1.654
	78212	1"	Bronze	1.654
	78217	1-1/4"	Bronze	1.654
	78222	1-1/2"	Bronze	1.811
	78227	2"	Bronze	1.929

Bronze Check Valve C x C					
	Stock Code	Size (d)	Material	(Z)	(L)
	22353	1/2"	Bronze	.0866	2.362
	22358	3/4"	Bronze	1.142	2.953
	22363	1"	Bronze	1.339	3.150
	22368	1-1/4"	Bronze	1.693	3.740
	22373	1-1/2"	Bronze	2.087	4.921
	22378	2"	Bronze	2.559	5.709

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

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



# ProPress XL (Bronze)

2-1/2" to 4" fittings

Dimensional documentation



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

## Dimensional documentation (inches)

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

Coupling C x C with Stop					
	Stock Code	Size (d)	Material	(Z)	(L)
	91342	2-1/2"	Bronze	0.315	4.528
	91347	3"	Bronze	0.315	4.528
	91352	4"	Bronze	0.315	5.315


Elbow 90° C x C					
	Stock Code	Size (d)	Material	(Z)	(L)
	91357	2-1/2"	Bronze	2.165	4.331
	91362	3"	Bronze	2.362	4.528
	91367	4"	Bronze	2.894	5.453


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

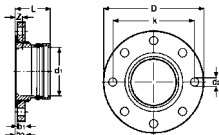


# ProPress XL (Bronze) 2-1/2" to 4"

## Dimensional documentation (inches)

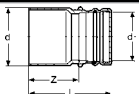
Elbow 45° C x C					
	Stock Code	Size (d)	Material	(Z)	(L)
	91417	2-1/2"	Bronze	1.083	3.248
	91422	3"	Bronze	1.181	3.346
	91427	4"	Bronze	1.358	3.917

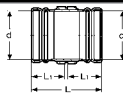
Cap C					
	Stock Code	Size (d x Rp)	Material	(Z)	(L)
	91432	2-1/2" x 3/4"	Bronze	0.827	2.992
	91437	3" x 3/4"	Bronze	0.846	3.012
	91442	4" x 3/4"	Bronze	0.945	3.504


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

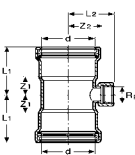
# ProPress XL (Bronze) 2-1/2" to 4"

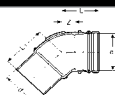
## Dimensional documentation (inches)

Reducer FTG x C					
	Stock Code	Size (d x d1)	Material	(Z)	(L)
	91452	4" x 2-1/2"	Bronze	3.150	4.567
	91457	4" x 3"	Bronze	3.031	4.606
	91472	3" x 2-1/2"	Bronze	3.384	5.591

Coupling C x C No Stop					
	Stock Code	Size (d)	Material	(L)	(L1)
	91477	2-1/2"	Bronze	4.528	2.185
	91482	3"	Bronze	4.528	2.185
	91487	4"	Bronze	5.315	2.579

Elbow 90° FTG x C						
	Stock Code	Size (d)	Material	(Z)	(L)	(L1)
	91492	2-1/2"	Bronze	2.224	4.331	4.606
	91497	3"	Bronze	2.559	4.685	4.803
	91502	4"	Bronze	2.972	5.472	5.591

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

Elbow 45° FTG x C						
	Stock Code	Size (d)	Material	(Z)	(L)	(L1)
	91537	2-1/2"	Bronze	1.142	3.248	3.819
	91542	3"	Bronze	1.240	3.346	4.094
	91547	4"	Bronze	1.417	3.898	4.921

# 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 C x M					
	Stock Code	Size (d & R)	Material	(Z)	(L)
	20823	2-1/2" NPT	Copper	2.520	4.213
	20828	3"	Copper	2.598	4.567
	20838	4"	Copper	2.736	5.098

Coupling C x C with Stop					
	Stock Code	Size (d)	Material	(Z)	(L)
	20728	2-1/2"	Copper	0.945	4.331
	20733	3"	Copper	0.984	4.921
	20738	4"	Copper	1.063	5.787

Elbow 90° C x C					
	Stock Code	Size (d)	Material	(Z)	(L)
	20623	2-1/2"	Copper	3.189	4.882
	20628	3"	Copper	3.760	5.728
	20633	4"	Copper	4.902	7.264

Adapter Flange C x Flange (new version)					

Stock Code	Size (d1)	Material	(Z)	(L)	(b)	(k)	(D)	(d2)
20853	2-1/2"	Copper/Steel	1.102	2.795	0.787	5.512	7.087	0.748
20858	3"	Copper/Steel	1.201	3.169	0.787	5.984	7.480	0.748
20863	4"	Copper/Steel	1.240	3.602	0.807	7.520	9.055	0.748

Cap C					
	Stock Code	Size (d)	Material	(Z)	(L)
	20833	2-1/2"	Copper	1.339	3.031
	20843	3"	Copper	1.358	3.327
	20848	4"	Copper	1.398	3.760

Adapter C x F					
	Stock Code	Size (d)	Material	Z (in)	L (in)
	20819	2-1/2"	Copper	2.46	4.15
	20829	3"	Copper	2.60	4.57
	20839	4"	Copper	2.78	5.14

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

## Dimensional documentation (inches)

Tee C x C x C								
Stock Code	Size (d1 x d2 x d3)	Material	(Z1)	(Z2)	(Z3)	(L1)	(L2)	(L3)
20683	2-1/2" x 2-1/2" x 2-1/2"	Copper	1.831	1.870	1.831	3.524	3.563	3.524
20688	2-1/2" x 2-1/2" x 2"	Copper	1.535	1.732	1.535	3.228	3.327	3.228
20803	2-1/2" x 2-1/2" x 1-1/2"	Copper	1.299	1.732	1.299	2.992	3.169	2.992
22278	2-1/2" x 2" x 2"	Copper	2.232	1.732	1.535	3.819	3.327	3.228
22283	2-1/2" x 2" x 1-1/2"	Copper	1.909	1.732	1.299	3.504	3.169	2.992
22288	2-1/2" x 2-1/2" x 1-1/4"	Copper	1.161	1.713	1.161	2.854	2.756	2.854
22293	2-1/2" x 2-1/2" x 1"	Copper	1.043	1.732	1.043	2.736	2.638	2.736
22298	2-1/2" x 2-1/2" x 3/4"	Copper	0.906	1.575	0.906	2.598	2.480	2.598
22303	2-1/2" x 2-1/2" x 1/2"	Copper	0.906	1.516	0.906	2.598	2.264	2.598
20693	3" x 3" x 3"	Copper	2.067	2.146	2.067	4.035	4.114	4.035
22308	3" x 3" x 1"	Copper	1.063	1.988	1.063	3.031	2.894	3.031
22313	3" x 3" x 1-1/4"	Copper	1.181	1.969	1.181	3.150	3.012	3.150
22323	3" x 3" x 3/4"	Copper	0.925	1.870	0.925	2.894	2.776	2.894
20698	3" x 3" x 2"	Copper	1.555	1.988	1.555	3.524	3.583	3.524
20703	3" x 3" x 2-1/2"	Copper	1.850	2.126	1.850	3.819	3.819	3.819
20798	3" x 3" x 1-1/2"	Copper	1.299	1.988	1.299	3.287	3.425	3.287
20708	4" x 4" x 4"	Copper	2.598	2.697	2.598	4.961	5.059	4.961
20713	4" x 4" x 2"	Copper	1.594	2.500	1.594	3.957	4.094	3.957
20718	4" x 4" x 2-1/2"	Copper	1.890	2.638	1.890	4.252	4.331	4.252
20808	4" x 4" x 1-1/2"	Copper	1.358	2.500	1.358	3.720	3.937	3.720
20723	4" x 4" x 3"	Copper	2.106	2.657	2.106	4.469	4.626	4.469

Tee C x C x F						
Stock Code	Size (d x d x Rp)	Material	(Z1)	(Z2)	(L1)	(L2)
20868	4" x 4" x 2"	Copper	1.594	2.598	3.957	3.287
20873	4" x 4" x 3/4"	Copper	0.965	2.461	3.327	3.071
20878	2-1/2" x 2-1/2" x 2"	Copper	1.535	1.831	3.228	2.520
20883	2-1/2" x 2-1/2" x 3/4"	Copper	0.906	1.693	2.598	2.303
20893	3" x 3" x 3/4"	Copper	0.925	1.949	2.894	2.559

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

## Dimensional documentation (inches)

Reducer FTG x C					
	Stock Code	Size (d x d1)	Material	(Z)	(L)
	20758	2-1/2" x 2"	Copper	2.264	3.858
	20763	3" x 2"	Copper	2.815	4.409
	20768	3" x 2-1/2"	Copper	2.559	4.252
	20773	4" x 2"	Copper	4.232	5.807
	20778	4" x 2-1/2"	Copper	4.173	5.787
	20783	4" x 3"	Copper	3.957	5.846
	20813	2-1/2" x 1-1/2"	Copper	2.480	3.937
	20818	3" x 1-1/2"	Copper	3.346	4.803

Elbow 45° C x C					
	Stock Code	Size (d)	Material	(Z)	(L)
	20653	2-1/2"	Copper	1.476	3.169
	20658	3"	Copper	1.732	3.701
	20663	4"	Copper	2.224	4.587

Coupling C x C No Stop					
	Stock Code	Size (d)	Material	(L)	
	20743	2-1/2"	Copper	4.331	
	20748	3"	Copper	4.921	
	20753	4"	Copper	5.787	

Elbow 90° FTG x C						
	Stock Code	Size (d)	Material	(Z)	(L)	(L1)
	20638	2-1/2"	Copper	3.189	4.882	4.803
	20643	3"	Copper	3.760	5.728	5.630
	20648	4"	Copper	4.902	7.264	7.126

Elbow 45° FTG x C						
	Stock Code	Size (d)	Material	(Z)	(L)	(L1)
	20668	2-1/2"	Copper	1.476	3.169	3.091
	20673	3"	Copper	1.732	3.701	3.602
	20678	4"	Copper	2.224	4.587	4.449

Butterfly Valve											
	Stock Code	Size	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	H (in)	I (in)
	22074	2-1/2"	6.496	7.401	0.96	0.75	1.50	1.50	1.50	0.98	0.98
	22075	3"	6.496	7.637	0.96	0.94	1.85	1.50	1.85	0.98	0.98
	Stock Code	Size	A (in)	B (in)	C (in)	D (in)	E (in)	F (in)	G (in)	H (in)	I (in)
	22076	4"	9.055	8.464	1.14	0.94	1.85	1.69	1.85	1.22	1.22

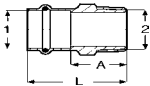
# ProPressG

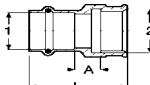
1/2" to 2" fittings

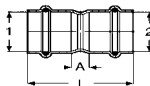
Dimensional documentation

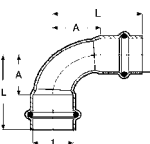


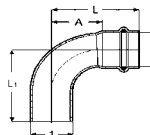
## Dimensional documentation (inches)

Adapter C x M					
	Stock Code	Size (1 x 2)	Material	(A)	(L)
	16043	1/2" x 3/8" NPT	Bronze	0.96	1.713
	16048	1/2" x 1/2" NPT	Bronze	1.12	1.870
	16053	3/4" x 3/4" NPT	Bronze	1.18	2.087
	16058	1" x 1" NPT	Bronze	1.46	2.362
	16063	1-1/4" x 1-1/4" NPT	Bronze	1.54	2.559
	16068	1-1/2" x 1-1/2" NPT	Bronze	1.54	2.953
	16073	2" x 2" NPT	Bronze	1.67	3.248

Adapter C x F					
	Stock Code	Size (1 x 2)	Material	(A)	(L)
	77892	1/2" x 1/2" NPT	Bronze	0.291	1.575
	77902	3/4" x 1/2" NPT	Bronze	0.331	1.772
	77907	3/4" x 3/4" NPT	Bronze	0.394	1.850
	77917	1" x 1" NPT	Bronze	0.480	2.047

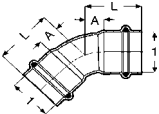
Coupling C x C with Stop					
	Stock Code	Size (1 & 2)	Material	(A)	(L)
	16098	1/2"	Copper	0.228	1.732
	16103	3/4"	Copper	0.228	2.205
	16108	1"	Copper	0.346	2.205
	16113	1-1/4"	Copper	0.315	2.441
	16118	1-1/2"	Copper	0.315	3.307
	16123	2"	Copper	0.315	3.622

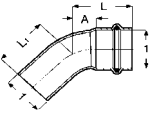
Elbow 90° C x C Close Rough					
	Stock Code	Size (1)	Material	(A)	(L)
	16128	1/2"	Copper	0.748	1.496
	16133	3/4"	Copper	1.039	1.945
	16138	1"	Copper	1.323	2.228
	16143	1-1/4"	Copper	1.654"	2.677
	16148	1-1/2"	Copper	1.984	3.402
	16153	2"	Copper	2.551	4.126

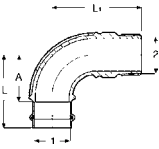
Elbow 90° FTG x C Close Rough						
	Stock Code	Size (1)	Material	(A)	(L)	(L1)
	16158	1/2"	Copper	0.748	1.496	1.535
	16163	3/4"	Copper	1.039	1.945	1.984
	16168	1"	Copper	1.323	2.228	2.268
	16173	1-1/4"	Copper	1.365	2.677	2.756
	16178	1-1/2"	Copper	1.984	3.402	3.480
	16183	2"	Copper	2.551	4.126	4.205

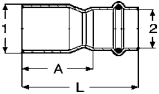


## Dimensional documentation (inches)

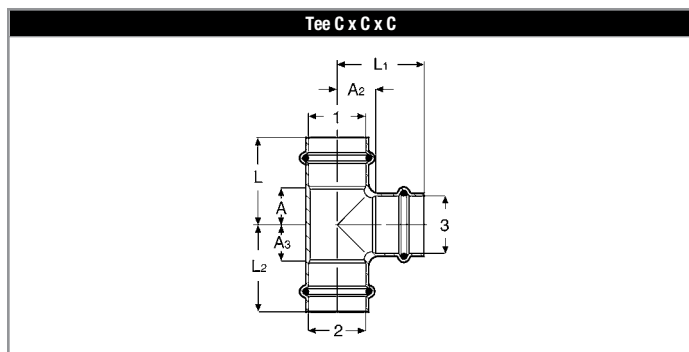
Elbow 45° C x C					
	Stock Code	Size (1)	Material	(A)	(L)
	16188	1/2"	Copper	0.295	1.043
	16193	3/4"	Copper	0.433	1.339
	16198	1"	Copper	0.551	1.457
	16203	1-1/4"	Copper	0.685	1.709
	16208	1-1/2"	Copper	0.823	2.240
	16213	2"	Copper	1.059	2.634

Elbow 45° FTG x C						
	Stock Code	Size (1)	Material	(A)	(L)	(L1)
	16218	1/2"	Copper	0.311	1.059	1.098
	16223	3/4"	Copper	0.433	1.339	1.374
	16228	1"	Copper	0.551	1.457	1.492
	16233	1-1/4"	Copper	0.685	1.709	1.787
	16238	1-1/2"	Copper	0.823	2.240	2.319
	16243	2"	Copper	1.059	2.634	2.709

Elbow 90° C x M						
	Stock Code	Size (1 x 2)	Material	(A)	(L)	(L1)
	17658	1/2" x 1/2" NPT	Bronze	0.945	1.693	1.890
	17663	3/4" x 3/4" NPT	Bronze	1.102	2.008	2.323
	17668	1" x 1" NPT	Bronze	1.382	2.287	2.835
	17673	1-1/4" x 1-1/4" NPT	Bronze	1.870	2.894	3.465
	17678	1-1/4" x 1-1/2" NPT	Bronze	2.205	3.622	3.839
	17683	2" x 2" NPT	Bronze	2.756	4.331	4.724

Reducer FTG x C					
	Stock Code	Size (1 x 2)	Material	(A)	(L)
	163343	3/4" x 1/2"	Copper	1.417	2.165
	163348	1" x 1/2"	Copper	1.693	2.441
	163353	1" x 3/4"	Copper	1.417	2.323
	163358	1-1/4" x 1"	Copper	1.575	2.480
	163363	1-1/2" x 1"	Copper	2.283	3.189
	163368	1-1/2" x 1-1/4"	Copper	2.04	3.071
	163373	2" x 1"	Copper	3.031	3.937
	163378	2" x 1-1/4"	Copper	2.795	3.819
	163383	2" x 1-1/2"	Copper	2.638	4.055

## Dimensional documentation (inches)



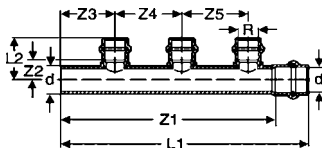
Stock Code	Size (1 x 2 x 3)	Material	(A)	(A2)	(A3)	(L)	(L1)	(L2)
16248	1/2" x 1/2" x 1/2"	Copper	0.738	0.498	0.738	1.496	1.443	1.496
16253	3/4" x 3/4" x 3/4"	Copper	0.837	0.591	0.837	1.752	1.496	1.752
16258	3/4" x 3/4" x 1/2"	Copper	0.687	0.630	0.687	1.594	1.378	1.594
16263	1" x 1" x 1"	Copper	0.955	0.787	0.955	1.870	1.693	1.870
16268	1" x 3/4" x 3/4"	Copper	0.837	0.748	1.043	1.752	1.654	1.949
17688	1" x 1" x 1/2"	Copper	0.689	0.787	0.689	1.594	1.535	1.594
16273	1" x 1" x 3/4"	Copper	0.844	0.748	0.844	1.752	1.654	1.752
16278	1-1/4" x 1-1/4" x 1-1/4"	Copper	1.024	0.866	1.024	2.047	1.890	2.047
16293	1-1/2" x 1-1/2" x 1"	Copper	0.748	1.181	0.748	2.165	2.087	2.165
16298	1-1/2" x 1-1/2" x 1-1/4"	Copper	0.866	1.142	0.866	2.283	2.165	2.283
16303	2" x 2" x 2"	Copper	1.378	1.378	1.378	2.953	2.953	2.953
16308	2" x 2" x 1-1/2"	Copper	1.142	1.378	1.142	2.717	2.795	2.717

**Cap C**

Stock Code	Size (d)	Material	(L)	(D)
16313	1/2"	Copper	0.917	0.799
16318	3/4"	Copper	1.067	0.945
16323	1"	Copper	1.110	0.992
16328	1-1/4"	Copper	1.319	1.201
16333	1-1/2"	Copper	1.622	1.465
16338	2"	Copper	1.811	1.677

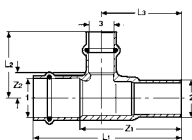
## Dimensional documentation (inches)

### ProPressG Manifold 3-Outlets (open) C x FTG x C



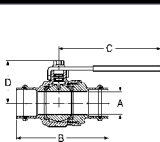
Stock Code	Size (d x R)	Material	(L1)	(L2)	(Z1)	(Z2)	(Z3)	(Z4)	(Z5)
18453	1" x 1/2"	Copper	7.323	1.512	6.378	0.773	1.654	1.969	1.969

### ProPressG Manifold 1-Outlet (open) C x FTG x C



Stock Code	Size (1 x 2 x 3)	Material	(Z1)	(Z2)	(L1)	(L2)	(L3)
16388	3/4" x 3/4" x 1/2"	Copper	2.028	0.630	3.189	1.378	1.594
16393	1" x 1" x 3/4"	Copper	2.500	0.748	3.661	1.654	1.909
16398	1-1/4" x 1-1/4" x 1"	Copper	3.071	0.906	4.094	1.811	2.185
18448	1" x 1" x 1/2"	Copper	2.500	0.787	3.661	1.535	2.067

### ProPressG Ball Valve — C x C



Stock Code	Size (d)	Material	(A)	(B)	(C)	(D)
19648	1/2"	Brass	0.551	3.700	4.760	1.540
19653	3/4"	Brass	0.787	4.060	4.760	1.610
19658	1"	Brass	0.984	4.350	4.760	1.760
19663	1-1/4"	Brass	1.120	4.490	6.100	2.180
19668	1-1/2"	Brass	1.500	5.530	6.100	2.470
19673	2"	Brass	1.850	6.460	6.100	2.720

## 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)

