Pocket Guide

Viega ProPress® Systems

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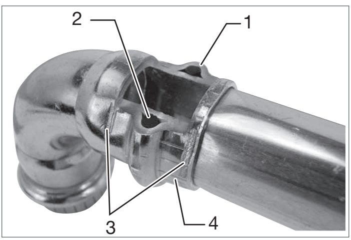
Viega.

Connected in quality.

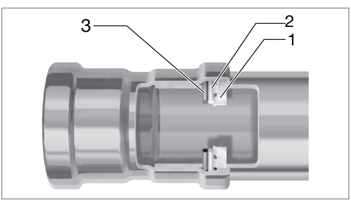
Building on Tradition
Founded 120 years ago, Viega is a privately owned, international group of companies. In the United States, Canada, Mexico, and Latin America, Viega specializes in plumbing, heating, and pipe joining technologies. The values of Viega's founder, Franz-Anselm Viegener, are just as present today as they were when he started the company in 1899. Courage, passion, and innovative spirit are still the basics of Viega's foundation.

ProPress 2½" to 4" formerly ProPress XL-C®.

At Viega, safety is priority.
Safe, certain, and secure, Viega fittings are designed for peace of mind.



1. In all ProPress ½" to 2" fittings, Viega's unique, patented Smart Connect technology helps installers ensure that they have pressed all connections.
2. The EPDM sealing element is suitable for many applications.
3. Viega's distinctive hexagonal pressing pattern bonds the fitting and tube and provides the mechanical strength for the connection.
4. Cylindrical guides help installers ensure the proper insertion of the tube and protect the sealing element.



1. In ProPress 2½" to 4" fittings, the 420 stainless steel grip ring's teeth bite into the tube and lock the fitting securely in place.
2. A PBT (Polybutylene Terephthalate) separator ring protects the sealing element from damage by creating a positive physical separation during installation and later during pressing.
3. The EPDM sealing element ensures water-tight or air-tight connections.

Table of Contents

Viega products are designed to be installed by licensed and trained plumbing and mechanical professionals who are familiar with Viega products and their installation. **Installation by non-professionals may void Viega LLC's warranty.**

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

This document is subject to updates. For the most current Viega technical literature please visit www.viega.us.

Viega ProPress Systems

Viega ProPress systems are state-of-the-art press fitting systems that provide economical and reliable installations for the commercial, industrial, and residential markets.

Viega ProPress are copper and zero lead bronze fittings and valves in copper tube size (CTS) ranging from ½" to 4". The fittings require no soldering or brazing and are installed with electro-hydraulic press tools (battery-powered or corded press tools).

The fittings feature a green dot representing Smart Connect® technology with an EPDM sealing element suitable for many applications. Viega's unique, patented Smart Connect technology helps installers ensure that they have pressed all connections.

Viega ProPress systems can help reduce installation time up to 60 percent compared to traditional methods of pipe joining. Soldering and brazing copper can be messy and time consuming, and connections are not always reliable. With Viega press technology, installers can make consistent, secure press connections in less than seven seconds without flame or heavy equipment.

For applications ranging from potable water to inert gases, Viega ProPress fittings can be customized for a wide variety of applications in industrial, commercial, or residential projects.

Smart Connect Technology – Security Under Pressure

Locating unpressed connections is an important step in the pressure testing process. Viega ProPress includes Smart Connect technology, providing quick and easy identification of unpressed connections during a pressure test.

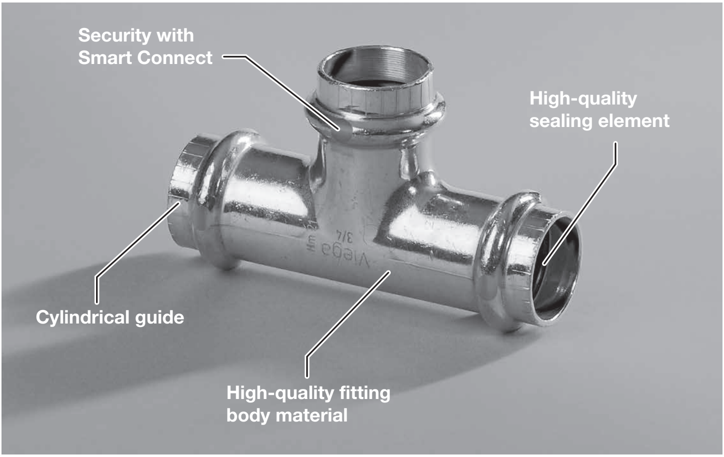
Smart Connect technology is an integral part of the design of the fitting, providing a path for liquids and/or gases from inside the system past the sealing element of an unpressed connection. When pressed according to our Product Instructions, the fluid path is altered, creating a leak-proof, reliable connection.

Unpressed connections are located by pressurizing the system with air or water. When testing with water the proper pressure range is 15 to 85 psi. Pressure testing with air can be dangerous at high pressures. When testing with compressed air the proper pressure range is ½ to 45 psi. Following a successful Smart Connect test, the system may be pressure tested up to 600 psi maximum for water and 200 psi maximum for air if required by local code requirements.

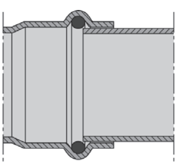
1 Identify an unpressed connection during pressure testing when air or water flows past the sealing element.

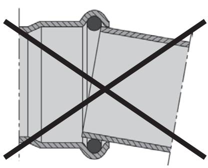
2 Upon identification, use the press tool to press the fitting, making a secure, leak-proof connection.

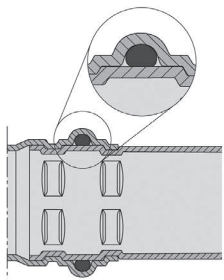
3 Viega ProPress connections are fast, flameless, and reliable.



Cylindrical Guides







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

Fittings that do not have cylindrical guides risk making an unsecure connection and leave the sealing element vulnerable to damage prior to pressing.

Fittings are radially pressed around the sealing element in a single step.

Viega ProPress Fitting Systems

Viega ProPress may only be pressed onto copper tube in accordance with ASTM B88 or B75. When pressing onto B88 copper tube types K, L, and M may be used. Tempers O60 and O50, known as “soft copper”, are limited to nominal sizes ½ to 1 ¼. Temper H58, known as “hard copper”, may be used with nominal sizes ½ to 4. When pressing onto B75 copper tube, the tube dimensions must be in accordance with Viega specifications. Only tempers H58, O60, and O50 may be used with ProPress.

Viega ProPress fittings are available in elbows, couplings, reducers, tees, reducing tees, threaded adapters, unions, caps, and flanges. All threaded ½" to 2" fittings are Zero Lead bronze.

Operating Parameters

- Operating Pressure: 200 psi maximum
- Test Pressure: 600 psi maximum
- Operating Temperature: 0°F to 250°F

Listings and Certificates

- NSF/ANSI 61
- NSF/ANSI 372
- IAPMO PS-117
- UL/ANSI 213
- FM Class 1920
- ICC-ES LC1002
- ABS
- CSA Low Lead Content
- ASME B16.51, B31.1, B31.3, B31.9
- NFPA 13, 13D, 13R

Compliant with:

- ASME B31
- ASTM B88
- ASTM B75
- IAPMO National Standard Plumbing Code (NSPC)
- IAPMO Uniform Mechanical Code (UMC)
- IAPMO Uniform Plumbing Code (UPC)
- ICC International Mechanical Code (IMC)
- ICC International Plumbing Code (IPC)
- ICC International Residential Code (IRC)

Approved Applications:

- Hot and cold potable water
- Rainwater/gray water
- Fire sprinkler (175 psi maximum)
- Chilled water
- Hydronic heating (with glycol)
- Low-pressure steam (15 psi maximum)
- Ethanol
- Compressed air
- Non-medical gases
- Vacuum (29.2" Hg maximum @ 68°F)

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.

It is the responsibility of the installer or any other parties to adhere to all applicable local rules and regulations governing the nature of the installation.

The use of the system for applications other than those listed or outside of these parameters must be approved by the Viega Technical Services Department.

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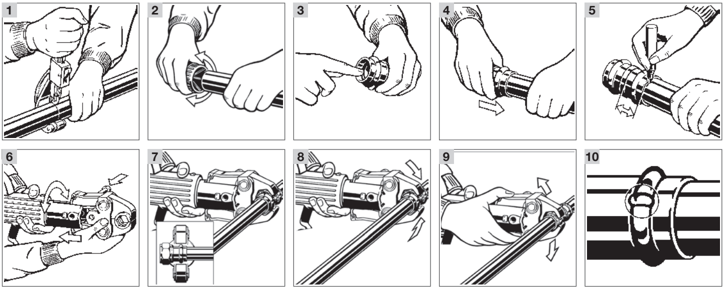
Viega ProPress ½" to 2" Fittings

For Hard Copper Tubing in ½" to 2" and Soft Copper Tubing in ½" to 1¼"



1 Cut the tube square using a displacement-type cutter or fine-toothed steel saw. Note: Cut tubing a minimum of four inches away from the contact area of the vise to prevent possible damage to the tubing in the press area.

2 Deburr inside and outside of the tube to the proper insertion depths to prevent cutting of the sealing element.

3 Check the sealing element for correct fit. Do not use oils or lubricants.

4 Mark the proper insertion depth on the outside of the tube (see table below). Improper insertion depth may result in improper seal.

Minimum Insertion Depth for ProPress						
Tube Size	½"	¾"	1"	1¼"	1½"	2"
Insertion Depth	¾"	⅞"	⅞"	1"	1 7/16"	1 9/16"

5 While turning slightly, slide press fitting onto the tube to the marked insertion depth. End of tubing must contact stop.

6 Insert appropriate Viega ProPress jaw into the press tool and push in, holding pin until it locks in place.

7 Open the jaw and place at right angle on the fitting. Visually check insertion depth using mark on tubing.

8 Hold trigger on press tool until press jaws have fully engaged the fitting. Jaws will automatically release after a full press is made.

WARNING!
Keep extremities and foreign objects away from press tool during pressing operation to prevent injury or incomplete press.

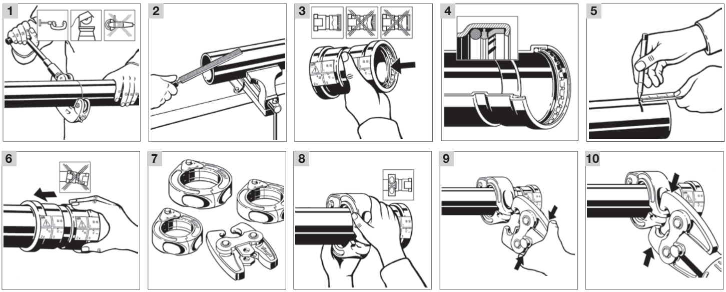
9 After pressing, open the jaw and remove the press tool.

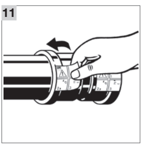
10 Pressure testing with Smart Connect: Unpressed connections are located by pressurizing the system with air or water. When testing with water, the proper pressure range is 15 psi to 85 psi. When testing with compressed air, the proper pressure range is ½ psi to 45 psi maximum. If testing with compressed air, use an approved leak-detect solution. Following a successful pressure test, the system may be pressure tested up to 200 psi with air or up to 600 psi with water.

Testing for unpressed connections using Smart Connect is not a replacement for pressure testing requirements of local codes and standards.

Viega ProPress 2½" to 4" Fittings

For Hard Copper Tubing in 2½" to 4"





1 Cut the tube square using a displacement-type cutter or fine-toothed steel saw. **Note:** Cut tubing a minimum of four inches away from the contact area of the vise to prevent possible damage to the tubing in the press area.

2 Deburr inside and outside of the tube to the proper insertion depths to prevent cutting of the sealing element.

3 Check the sealing element and grip ring for correct fit. Do not use oils or lubricants.

4 Illustration demonstrates proper fit of grip ring, separation ring, and sealing element.

5 Mark the proper insertion depth on the outside of the tube (see table below). Improper insertion depth may result in improper seal.

Minimum Insertion Depth for ProPress			
Tube Size	2½"	3"	4"
Insertion Depth	1 11/16"	1 15/16"	2 3/8"

6 While turning slightly, slide press fitting onto the tube to the marked insertion depth. End of tubing must contact stop.

7 Insert appropriate Viega ProPress jaw into the press tool and push in, holding pin until it locks in place. ProPress ½" to 4" fitting connections must be performed with ProPress XL-C rings and V2 actuator.

8 Open the XL-C ring and place at right angles on the fitting. Ensure that the XL-C ring is engaged on the fitting bead.

9 Open the V2 actuator and connect the V2 actuator to the XL-C ring. Visually check insertion depth using mark on tubing.

WARNING!
Keep extremities and foreign objects away from press tool during pressing operation to prevent injury or incomplete press.

10 Hold trigger until the V2 actuator has fully engaged the XL-C ring. Release V2 actuator from XL-C ring and then remove the XL-C ring from the fitting.

11 Remove tag from fitting, indicating press has been performed.

Note: Pressure testing with Smart Connect: Unpressed connections are located by pressurizing the system with air or water. When testing with water, the proper pressure range is 15 psi to 85 psi. When testing with compressed air, the proper pressure range is ½ psi to 45 psi maximum. If testing with compressed air, use an approved leak-detect solution. Following a successful pressure test, the system may be pressure tested up to 200 psi with air or up to 600 psi with water.

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Approved Applications

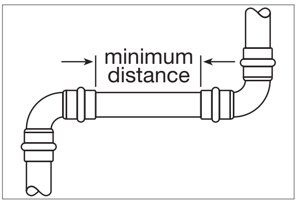
Media[1]	System Operating Conditions			Product Line, Material, and Sealing Element[2] ProPress Copper		
	Comments	Max Pressure (psig)	Temperature Range (°F)	EPDM	FKM	HNBR
Water/Liquids						
Hot and cold potable water	Test pressure 600 psi	200	Note 3	✓		
Rainwater / Graywater				✓	✓	
Chilled Water	≤50% Ethylene / Propylene glycol			✓	✓	
Hydronic Heating Water	≤50% Ethylene / Propylene glycol			✓	✓	
Fire Sprinkler	NFPA 13, 13D, 13R	175	Ambient[6]	✓		
Low-pressure steam		15	Max 250°		✓[4]	
Fuels/Oils/Lubricants						
Ethanol	Pure grain alcohol	200	Ambient[6]	✓		
Lube Oil	Petroleum based		Max 150°			✓
Diesel Fuel		125	Max 100°			✓
Gases						
Compressed Air	Oil Concentration ≤25 mg/m³	200	Max 140°	✓	✓	✓
	Oil Concentration >25 mg/m³				✓	✓
Nitrogen - N_2				✓	✓	✓
Carbon Dioxide - CO_2	Dry			✓	✓	✓
Carbon Monoxide - CO				✓	✓	✓
Argon - Ar				✓	✓	✓
Oxygen - O_2	Non-medical Keep free of oil and grease	140	Max 140°	✓		
Hydrogen - H_2		125		✓	✓	✓
Vacuum	Minimum absolute pressure	750µm Hg	Max 160°	✓	✓	✓
Special Media						
Acetone	Liquid	70	-14° to 104°	✓		

[1] It is recommended that all systems be clearly labeled with the media being conveyed. For further information please consult Viega Technical Services.
[2] All Viega systems must be used with the manufacturer's recommended sealing element. Contact your local Viega representative or Viega Technical Services for specific application temperature, pressure, and concentration limits.
[3] System pressure and temperature ranges depend on sealing element. Any ranges listed above will be overruled by the sealing element limits here:
- [3a] EPDM temperature ranges are typically 0°F to 250°F.
- [3b] FKM temperature ranges are typically 14°F to 284°F with temperature spikes (24hr) up to 356°F.
- [3c] HNBR temperature ranges are typically -40°F to 180°F.

[4] System contains adequate condensate drainage.
[5] Compliant with CSA 6.32 / ANSI LC-4.
[6] Ambient temperatures should be taken as normal operating conditions for the applications not to exceed sealing element limitations.
[7] Tubing with oxygen barrier should be used for systems with ferrous components.

Minimum Clearance Between Two Viega Press Connections

Tubing Diameter (in)	Viega ProPress Minimum Clearance (in)	Minimum Clearance (mm)
½	0	0
¾	0	0
1	0	0
1¼	7⁄16	10
1½	⅝	15
2	¾	20
2½	⅝	15
3	⅝	15
4	⅝	15



Friction Loss in Equivalent Feet of Tube

			Wrought — Copper Fittings		
Size	90° Elbow	45° Elbow	Tee Branch	Tee Run	Coupling
½"	1.0	0.5	2.0	—	—
¾"	2.0	0.5	3.0	—	—
1"	2.5	1.0	4.5	—	—
1¼"	3.0	1.0	5.5	0.5	0.5
1½"	4.0	1.5	7.0	0.5	0.5
2"	5.5	2.0	9.0	0.5	0.5
2½"	7.0	2.5	12.0	0.5	0.5
3"	9.0	3.5	15.0	1.0	1.0
4"	12.5	5.0	21.0	1.0	1.0

	Cast — Zero Lead Bronze Fittings		
Size	90° Elbow	Tee Run	Tee Branch
½"	1	½	2
¾"	2	½	3
1"	4	½	5
1¼"	5	1	7
1½"	8	1	9
2"	11	2	12

Sealing Element Description

EPDM Sealing Element

ProPress fittings are manufactured with an EPDM sealing element installed at the factory. The EPDM sealing element is used mainly for potable water, hydronic heating, fire sprinkler, and compressed air installations.

Definition: EPDM
Ethylene-Propylene-Diene-Monomer, gloss black in color

Operating Temperature: 0°F to 250°F

The EPDM sealing element is a synthetically manufactured and peroxidically cross-linked general-purpose elastomer with a wide range of applications. It is resistant to aging, ozone, UV, weathering, environmental influences, chemicals, and most alkaline solutions.

The EPDM sealing element is recommended for drinking water applications. It is particularly resistant to hot water, making it ideal for seals and gaskets in heating systems, fittings, and household appliances (e.g., washing machines, pumps, and dishwashers). It is not resistant to hydrocarbon solvent solutions, oils, chlorinated hydrocarbons, turpentine, and gasoline.

FKM Sealing Element

ProPress fittings may be changed from the factory-installed EPDM sealing element to an FKM sealing element. See *Changing Sealing Elements Product Instructions.* FKM is well known for its excellent resistance to petroleum products and solvents as well as exceptional high-temperature performance, which make it ideal for seals and gaskets in solar, district heating, low-pressure steam, and compressed air system.

Definition: FKM
Fluoroelastomer, dull black in color

Operating Temperature: 14°F to 284°F (with temperature spikes up to 356°F)

The FKM sealing element is a special-purpose elastomer typically installed where higher temperatures are required. It possesses excellent resistance to aging, ozone, UV, weathering, environmental influences, and oils and petroleum-based additives.

HNBR Sealing Element

ProPress press fittings may be changed from the factory-installed EPDM sealing element to an HNBR sealing element. See *Changing Sealing Elements Product Instructions.* The HNBR sealing element is used mainly for inert gas, liquid fuel, and lubricant oil. It is commonly used in fuel oil heating systems.

Definition: HNBR
Hydrogenated Nitrile Butadiene Rubber, yellow in color

Operating Temperature: -40°F to 180°F

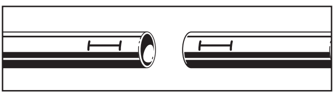
HNBR is widely known for its physical strength and retention of its properties after long-term exposure to heat, oil, and chemicals.

The unique properties of the HNBR sealing element have resulted in the wide adoption of it 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.)

The HNBR sealing element is not suitable for food contact applications and cannot be installed in drinking water applications.

No-Stop Couplings

No-stop couplings and extended no-stop couplings are often used to conduct repairs. Without a stop, these couplings can slide completely onto a tube and allow a connection to be made in tighter spaces. Unlike fittings with an integrated stop that have a minimum insertion depth, no-stop couplings have minimum and maximum allowable insertion depths. The minimum and the maximum insertion depths should be marked and a line should connect the two marks. Drawing a line between the minimum and maximum insertion marks distinguishes a good connection on a no-stop coupling from a bad connection on a coupling with a stop.



Viega ProPress No-Stop Couplings				
Tube Diameter (in)	Minimum Insertion		Maximum Insertion	
	in	mm	in	mm
½	¾	19	⅞	22
¾	⅞	23	1⅛	28
1	⅞	23	1⅛	28
1¼	1	26	1³⁄₁₆	30
1½	1⁷⁄₁₆	37	1⁹⁄₁₆	40
2	1⁹⁄₁₆	40	1¾	44
2½	1¹¹⁄₁₆	43	2⅝	67
3	1¹⁵⁄₁₆	50	2¹⁵⁄₁₆	75
4	2⅜	60	3⁷⁄₁₆	87

Viega ProPress Extended No-Stop Couplings				
Tube Diameter (in)	Minimum Insertion		Maximum Insertion	
	in	mm	in	mm
½	¾	19	2¼	57
¾	⅞	23	2⅝	67
1	⅞	23	2⅞	73
1¼	1	26	3⅛	80
1½	1⁷⁄₁₆	37	3⁵⁄₁₆	84
2	1⁹⁄₁₆	40	3¾	95

Soldering or Brazing

Using ProPress In Line with Existing Fittings

Maintain proper distances when installing a ProPress fitting near an existing soldered or brazed fitting.

Tube Diameter (in)	Minimum Distance from Soldered		Minimum Distance from Brazed	
	in	mm	in	mm
½	¼	7	1	26
¾	¼	7	1½	38
1	⁷⁄₁₆	11	2	51
1¼	⁷⁄₁₆	11	2½	64
1½	⅝	16	3	76
2	¾	19	4	102
2½	¼	7	5	127
3	¼	7	6	153
4	¼	7	8	204

Soldering or Brazing In Line with Existing ProPress Fitting

To prevent damage to the sealing element and ensure proper sealing of the soldered/brazed joint and the press connection, maintain proper soldering/brazing distances from the fitting.

Tube Diameter (in)	Soldering Minimum Distance		Brazed Minimum Distance	
	in	mm	in	mm
½	1½	38	4½	114
¾	2¼	57	6¾	172
1	3	76	9	229
1¼	3¾	95	11¼	286
1½	4½	114	13½	343
2	6	153	18	457
2½	7½	191	22½	572
3	9	229	27	686
4	12	305	36	915

Welding

Welding Adjacent to a Press Fitting
To prevent damage to the sealing element, maintain proper welding distances from the fitting. If welding adjacent to the connection, weld a minimum of four inches away.

Welding Requirements
The installer should take precautions to keep the ProPress connection cool:
- Wrap the connection with a cold wet rag.
- Protect the connection with a weld blanket.
- Prefabricate solder connections/welded fittings prior to installing the press fitting. (Ensure tube has cooled before installing the press fitting.)
- Apply heat sink gel or spray or spot freezing.

General Installation Notes

Expansion
Thermal expansion in installed systems generates stress on tubing and appliance connectors. Compensation must be allowed for expansion and contraction that may occur within the tubing. Expansion joints or mechanical expansion compensators may be used to alleviate these stresses.

Electrical Bonding
When properly installed, ProPress fittings comply with Section 1211.15 Electrical Bonding and Grounding of the Uniform Plumbing Code.

The mechanical press provides continuous metal-to-metal contact between fitting and tube. The press ensures the continuity of the bonding through this contact.

Exposure to Freezing Temperatures
Viega ProPress systems with EPDM sealing elements can be installed in ambient temperatures down to 0°F. When the contents could freeze, tubing must be protected per acceptable engineering practices, codes, and as required by local code.

Underground Installations
Viega ProPress fitting systems with copper tubing are approved for underground installations. However, installations must meet all state and local codes, including those for underground. Proper authorization must be obtained prior to installation from the Authority Having Jurisdiction.

Concealed Spaces
The Viega ProPress fitting system has been approved for use in concealed spaces. Specific performance tests were conducted to evaluate the fittings for use in concealed spaces. Concealed tubing and fittings shall be protected from puncture threats.

Corrosion Protection
Viega ProPress fittings exposed to corrosive action, such as soil conditions or moisture, must be protected in an approved manner in accordance with NFPA 54 Section 404.8, NACE Standard RP0169-2002 Section 5, 2009 UPC Chapter 6 Section 609.3.1, 2009 UMC Chapter 13 Section 1312.1.3, or satisfying local code requirements. In addition, systems should be properly sized to minimize the risk of erosion corrosion resulting from excessive velocities.

Pressure Surges
- Pressure surges or transients from fast-acting valves, pump surges, and other sources that result in water hammer may cause damage to many system components, including press fittings.
- When fast-acting valves and/or pumps are incorporated into a system, the designer and installer should isolate press fittings from sharp pressure surges.

Transition Fittings – Threaded
The Viega ProPress systems can be joined with off-the-shelf threaded fittings made of non-ferrous metals. In this regard:
- The threaded connection is made first.
- The press connection is made second.

This process avoids unnecessary torsion on the press fitting.

Transition Fittings – Flange

When using Viega flanges, bolt the flange end in place prior to pressing the fitting to the tube.

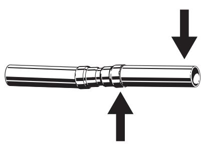
Rotating a Pressed Fitting

Once a ProPress fitting has been pressed, it can be rotated (not by hand), but once rotated more than five degrees, the fitting should be re-pressed to restore resistance to rotational movement. If the fitting is re-pressed, care should be taken to align the flat sides on the jaw with those on the fitting.

Deflection

The pressing process can cause deflection (angular misalignment) to occur. When pressing Viega ProPress fittings in a system, the deformation of the fitting is constant. This allows for a consistent leak-free joint every time and is a result of the pressing technique.

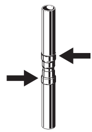
Deflection occurs in the same way for every fitting. The fitting being pressed will move in the direction of the jaw or ring opening.



- Since the fitting will deflect toward the opening of the jaw or ring, the tube end will deflect in the opposite direction.
- By counteracting the fitting movement, one can minimize the deflection of the fitting and ultimately the tube.
- When using strut and clamps, deflection is minimized and nearly eliminated depending on clamp spacing.

Controlling Deflection

Deflection while pressing can be minimized by utilizing the following installation practices.

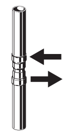


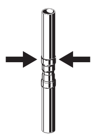
Alternates for Presses

- Press one end of fitting.
- Make second press on other end of fitting from the opposite side.

Push-Pull Method

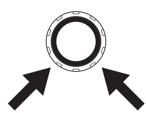
- Rings = Push on press tool.
- Jaws = Pull on press tool. The press tool can be feathered using the trigger as needed to apply pulling or pushing force to control deflection.





Re-Press

- Press the fitting, once on each side (that is, re-press the fitting a second time on the opposite side).
- Pressing the same connection from the opposite side will usually straighten misalignment between the tube and fitting.



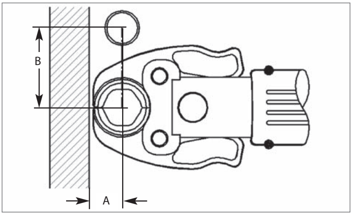
- When pressing overhead piping, it may be inconvenient to alternate sides for each press.
- The natural weight of the piping plus pressing on opposite sides at a 45-degree angle should adequately eliminate deflection.
- This technique can also be used for any horizontal piping and when working above the piping.

Tool Clearances

Minimum distances should be taken into consideration during planning in order to avoid space constraints during installation.

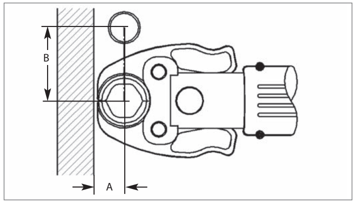
Ensure that the space required for system pressing tools is available if Viega ProPress fittings will be installed immediately upstream or downstream from wall or floor penetrations.

ProPress Standard Jaws Clearance



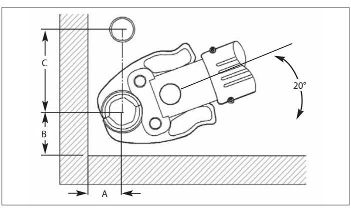
Tube Diameter	A minimum	B minimum
½"	¾"	1⅝"
¾"	⅞"	2⅛"
1"	1"	2½"
1¼"	1⅛"	2⅞"
1½"	1¾"	3½"
2"	2"	4⅜"

ProPress Compact Jaws Clearance



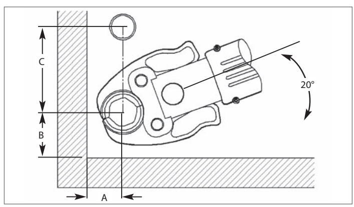
Tube Diameter	A minimum	B minimum
½"	¾"	2"
¾"	⅞"	2⅜"
1"	⅞"	2⅝"
1¼"	1⅛"	3⅛"

ProPress Standard Jaws Clearance Between Tube, Wall, and Floor



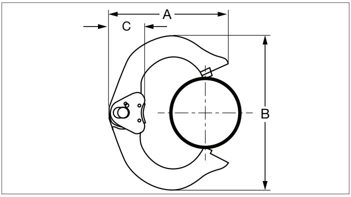
Tube Diameter	A minimum	B minimum	C minimum
½"	⅞"	1⅜"	2½"
¾"	1"	1½"	2½"
1"	1⅛"	1¾"	3"
1¼"	1¼"	2¼"	3⅛"
1½"	1⅞"	2½"	3¾"
2"	2⅛"	3⅛"	5"

ProPress Compact Jaws Clearance Between Tube, Wall, and Floor



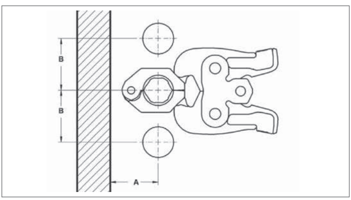
Tube Diameter	A minimum	B minimum	C minimum
½"	⅞"	1⅜"	2½"
¾"	1"	1½"	2¾"
1"	1⅛"	1⅝"	3"
1¼"	1⅝"	2⅛"	3⅜"

ProPress Rings Dimensions



Tube Diameter	A minimum	B minimum	C minimum
½"	2¼"	2⅛"	1 1/16"
¾"	2 11/16"	2⅞"	1⅛"
1"	2 15/16"	3 5/16"	1 3/16"
1¼"	3 5/16"	3⅞"	1 3/16"
1½"	3 11/16"	4 5/16"	1 3/16"
2"	4 7/16"	5 7/16"	1 3/16"

ProPress Rings with V1 Actuator Clearance

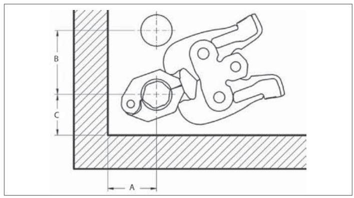


Tube Diameter	A minimum	B minimum
½"	1⅝"	2 3/16"
¾"	1¾"	2 3/16"
1"	2"	1⅝"
1¼"	2 3/16"	2 15/16"

ProPress Rings with V2 Actuator Clearance

Tube Diameter	A minimum	B minimum
1½"	2⅜"	3 5/16"
2"	2 9/16"	4⅛"

ProPress Rings with V1 Actuator Clearance Between Tube, Wall, and Floor



Tube Diameter	A minimum	B minimum	C minimum
½"	1⅝"	3 9/16"	2 5/16"
¾"	1¾"	3⅝"	2⅛"
1"	2"	3 13/16"	2 3/16"
1¼"	2 3/16"	3¾"	2⅛"

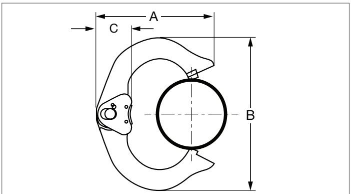
ProPress Rings with V2 Actuator Clearance Between Tube, Wall, and Floor

Tube Diameter	A minimum	B minimum	C minimum
1½"	2⅜"	5"	2 3/16"
2"	2 9/16"	4¾"	3 9/16"

ProPress Rings with C1 Actuator Clearance Between Tube, Wall, and Floor

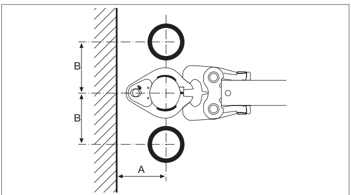
Tube Diameter	A minimum	B minimum	C minimum
½"	1⅝"	3¼"	2"
¾"	1¾"	3¼"	1⅞"
1"	2"	3¼"	1⅞"
1¼"	2 3/16"	3⅜"	1⅞"

ProPress XL-C Rings Dimensions



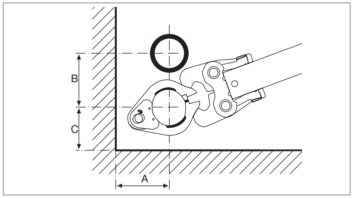
Tube Diameter	A minimum	B minimum	C minimum
2½"	6³⁄₁₆"	6¹⁵⁄₁₆"	2⁷⁄₁₆"
3"	7⁷⁄₁₆"	8¹³⁄₁₆"	2⁷⁄₁₆"
4"	8¹⁄₁₆"	10⁷⁄₁₆"	2⁷⁄₁₆"

ProPress XL-C Rings Clearance



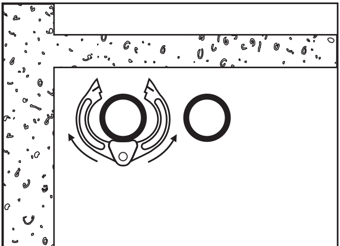
Tube Diameter	A minimum	B minimum
2½"	4⅛"	6"
3"	4⅜"	7"
4"	5"	8"

ProPress XL-C Rings Clearance Between Tube, Wall, and Floor

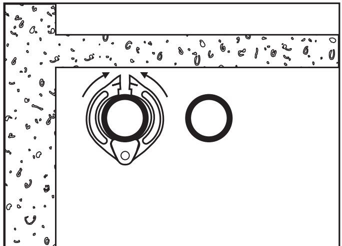


Tube Diameter	A minimum	B minimum	C minimum
2½"	4⅛	6"	4½"
3"	4⅜"	7"	4⅞"
4"	5"	8"	5¾"

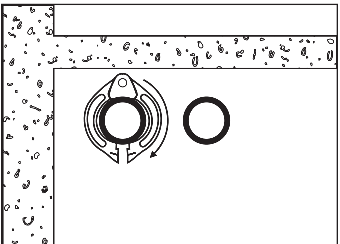
Pressing with Ring and Actuator in Tight Quarters



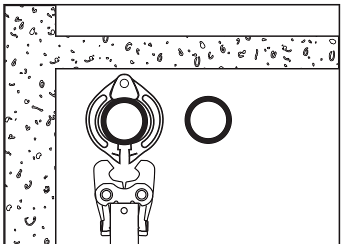
1. Wrap the actuator ring around the press fitting with the opening facing away from you.



2. Close the actuator tight around the fitting.



3. Rotate the actuator ring until the press jaw receptacle is facing toward you.



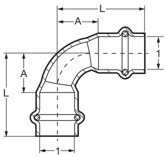
4. Properly insert press jaws and begin the press fitting procedure.

Notes

Dimensional Documentation

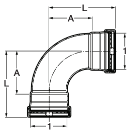
ProPress Fittings ½" to 4"

Viega ProPress 90° Elbow Copper P x P - Model 2916



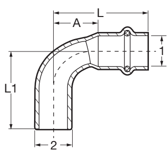
Part No.	Size (in) 1 1	A (in)	L (in)
77317	½ x ½	0.75	1.50
77022	¾ x ¾	0.76	1.67
77027	1 x 1	1.28	2.19
77032	1¼ x 1¼	1.28	2.31
77037	1½ x 1½	1.29	2.72
77042	2 x 2	2.16	3.74

Viega ProPress 90° Elbow P x P - Model 0916XL



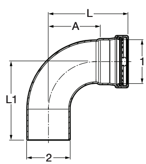
Part No.	Size (in) 1 1	A (in)	L (in)
20623	2½ x 2½	3.19	4.88
20628	3 x 3	3.76	5.73
20633	4 x 4	4.90	7.26

Viega ProPress 90° Street Elbow Copper P x FTG - Model 2916.1



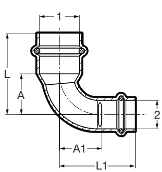
Part No.	Size (in) 1 2	A (in)	L (in)	L1 (in)
77347	½ x ½	0.75	1.50	1.54
77052	¾ x ¾	0.76	1.67	1.83
77057	1 x 1	1.28	2.19	2.27
77062	1¼ x 1¼	1.28	2.31	2.48
77067	1½ x 1½	1.29	2.72	2.80
77072	2 x 2	2.16	3.74	3.78

Viega ProPress 90° Street Elbow P x FTG - Model 0916.1XL



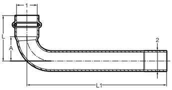
Part No.	Size (in) 1 2	A (in)	L (in)	L1 (in)
20638	2½ x 2½	3.19	4.88	4.80
20643	3 x 3	3.76	5.73	5.63
20648	4 x 4	4.90	7.26	7.13

Viega ProPress 90° Reducing Elbow Copper P x P - Model 2916.3



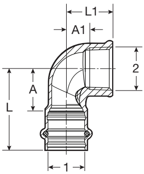
Part No.	Size (in) 1 2	A (in)	A1 (in)	L (in)	L1 (in)
77325	¾ x ½	0.91	0.94	1.81	1.69
77330	1 x ¾	1.20	1.30	2.11	2.21

Viega ProPress 90° Extended Street Elbow Copper P x FTG - Model 2947



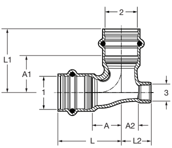
Part No.	Size (in) 1 2	A (in)	L (in)	L1 (in)
77353	¾ x ¾	1.02	1.93	5.98

Viega ProPress 90° Elbow Zero Lead Bronze P x FPT - Model 2914.2ZL



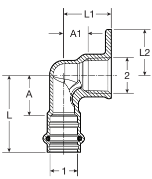
Part No.	Size (in) 1 2	A (in)	A1 (in)	L (in)	L1 (in)
79520	½ x ⅜ FPT	0.94	0.42	1.77	0.83
79525	½ x ½ FPT	0.94	0.57	1.77	1.10
79530	½ x ¾ FPT	1.06	0.51	1.89	1.06
79535	¾ x ½ FPT	1.06	0.65	1.97	1.18
79540	¾ x ¾ FPT	1.06	0.57	1.97	1.12
79545	1 x ½ FPT	1.06	0.72	1.97	1.26
79550	1 x 1 FPT	1.34	0.76	2.24	1.42
79560	1¼ x 1¼ FPT	1.54	0.89	2.56	1.57
79565	1½ x 1½ FPT	1.69	1.05	3.11	1.73
79570	2 x 2 FPT	2.17	1.35	3.74	2.05

Viega ProPress Vent Elbow Zero Lead Bronze P x P x FPT - Model 2917.3ZL



Part No.	Size (in) 1 2 3	A (in)	A1 (in)	A2 (in)	L (in)	L1 (in)	L2 (in)
79635	½ x ½ x ⅛ FPT	0.67	0.67	0.44	1.50	1.50	0.71
79640	¾ x ¾ x ⅛ FPT	0.83	0.83	0.54	1.73	1.73	0.81

Viega ProPress 90° Hi Ear Elbow Zero Lead Bronze P x FPT - Model 2925.2ZL

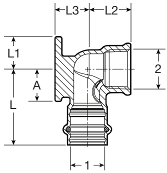


Part No.	Size (in) 1 2	A (in)	A1 (in)	L (in)	L1 (in)	L2 (in)
79205	½ x ½ FPT	0.94	0.57	1.77	1.10	1.07

ProPress Fittings ½" to 4"

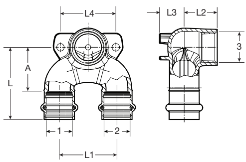
viega

Viega ProPress 90° Drop Ear Elbow Zero Lead Bronze P X FPT - Model 2925.5ZL



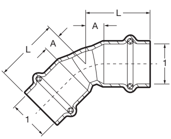
Part No.	Size (in) 1 2	A (in)	L (in)	L1 (in)	L2 (in)	L3 (in)
79185	½ x ⅜ FPT	0.94	1.77	0.74	0.83	0.67
79190	½ x ½ FPT	0.94	1.77	0.74	1.10	0.67
79195	¾ x ¾ FPT	1.06	1.97	0.83	1.12	0.83

Viega ProPress Double Drop Elbow Zero Lead Bronze P x P x FPT - Model 2928.7ZL



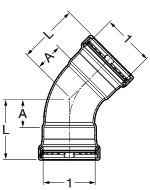
Part No.	Size (in) 1 2 3	A (in)	L (in)	L1 (in)	L2 (in)	L3 (in)	L4 (in)
78800	½ x ½ x ½ FNPT	1.34	2.17	1.97	1.10	0.67	1.57
78802	¾ x ¾ x ½ FNPT	1.54	2.44	1.97	1.10	0.83	2.05
78801	¾ x ¾ x ¾ FNPT	1.54	2.44	1.97	1.12	0.83	1.89
78803	1 x 1 x ½ FNPT	1.77	2.68	2.36	1.10	0.87	2.52

Viega ProPress 45° Elbow Copper P x P - Model 2926



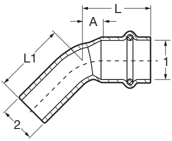
Part No.	Size (in) 1 1	A (in)	L (in)
77607	½ x ½	0.30	1.04
77023	¾ x ¾	0.36	1.26
77028	1 x 1	0.47	1.38
77033	1¼ x 1¼	0.58	1.61
77038	1½ x 1½	0.65	2.08
77043	2 x 2	0.86	2.44

Viega ProPress 45° P x P - Model 0926XL



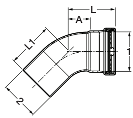
Part No.	Size (in) 1 1	A (in)	L (in)
20653	2½ x 2½	1.48	3.18
20658	3 x 3	1.73	3.70
20663	4 x 4	1.96	4.63

Viega ProPress 45° Street Elbow Copper P x FTG - Model 2926.1



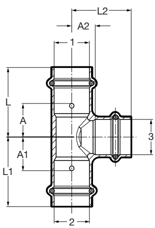
Part No.	Size (in) 1 2	A (in)	L (in)	L1 (in)
77637	½ x ½	0.31	1.06	1.10
77053	¾ x ¾	0.36	1.26	1.30
77058	1 x 1	0.47	1.38	1.49
77063	1¼ x 1¼	0.58	1.61	1.67
77068	1½ x 1½	0.65	2.08	2.04
77073	2 x 2	0.86	2.44	2.54

Viega ProPress 45° Street Elbow P x FTG - Model 0926.1XL



Part No.	Size (in) 1 2	A (in)	L (in)	L1 (in)
20668	2½ x 2½	1.48	3.18	3.10
20673	3 x 3	1.73	3.70	3.60
20678	4 x 4	2.23	4.59	4.45

Viega ProPress Tee Copper P x P x P - Model 2918



Part No.	Size (in) 1 2 3	A (in)	A1 (in)	A2 (in)	L (in)	L1 (in)	L2 (in)
77377	½ x ½ x ½	0.75	0.75	0.50	1.50	1.50	1.25
77382	½ x ½ x ¾	0.91	0.91	0.59	1.65	1.65	1.50
15493	½ x ½ x 1	1.10	1.10	0.55	1.85	1.85	1.46
77387	¾ x ¾ x ¾	0.85	0.85	0.59	1.75	1.75	1.50
77392	¾ x ½ x ½	0.69	0.98	0.63	1.59	1.73	1.38
77397	¾ x ½ x ¾	0.85	1.14	0.59	1.75	1.89	1.50
77402	¾ x ¾ x ½	0.69	0.69	0.63	1.59	1.59	1.38
77407	¾ x ¾ x 1	0.97	0.97	0.63	1.87	1.87	1.54
77412	1 x 1 x 1	0.97	0.97	0.79	1.87	1.87	1.69
22263	1 x ½ x ¾	0.85	1.24	0.75	1.76	1.99	1.66
94767	1 x ½ x 1	0.97	1.52	0.79	1.87	2.26	1.69
77417	1 x ¾ x ½	0.69	0.89	0.79	1.59	1.79	1.54
77422	1 x ¾ x ¾	0.85	1.04	0.75	1.75	1.95	1.65
77427	1 x ¾ x 1	0.97	1.18	0.78	1.87	2.07	1.69
77432	1 x 1 x ½	0.69	0.69	0.79	1.59	1.59	1.54
77437	1 x 1 x ¾	0.85	0.85	0.75	1.75	1.75	1.65
15488	1 x 1 x 1 ¼	1.16	1.16	0.84	2.07	2.07	1.87

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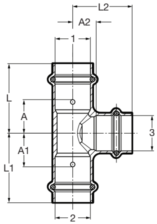
Viega ProPress Tee Copper P x P x P - Model 2918



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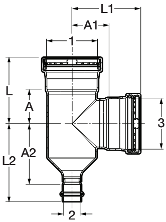
Part No.	Size (in) 1 2 3	A (in)	A1 (in)	A2 (in)	L (in)	L1 (in)	L2 (in)
77442	1¼ x 1¼ x 1¼	1.02	1.02	0.86	2.05	2.05	1.89
22253	1¼ x ½ x 1¼	1.02	1.77	0.87	2.05	2.52	1.89
22243	1¼ x ¾ x ½	0.64	1.13	0.93	1.68	2.03	1.68
22258	1¼ x ¾ x ¾	0.76	1.30	0.87	1.80	2.21	1.78
22268	1¼ x ¾ x 1	0.88	1.40	0.91	1.91	2.31	1.82
22248	1¼ x ¾ x 1¼	1.02	1.54	0.86	2.05	2.45	1.89
22238	1¼ x 1 x ½	0.64	0.91	0.93	1.68	1.82	1.68
94762	1¼ x 1 x ¾	0.76	1.14	0.87	1.79	2.05	1.77
14568	1¼ x 1 x 1	0.88	1.28	0.91	1.91	2.19	1.81
94757	1¼ x 1¼ x ½	0.65	0.65	0.93	1.67	1.67	1.67
77452	1¼ x 1¼ x ¾	0.77	0.77	0.89	1.79	1.79	1.77
77447	1¼ x 1¼ x 1	0.88	0.88	0.90	1.91	1.91	1.81
77457	1½ x 1½ x 1½	1.13	1.13	1.13	2.56	2.56	2.56
79660	1½ x 1 x ¾	0.67	1.39	1.16	2.17	2.44	2.05
15458	1½ x 1 x 1	0.74	1.54	1.06	2.17	2.44	1.97
15463	1½ x 1 x 1½	1.13	1.83	1.13	2.56	2.74	2.56
22233	1½ x 1¼ x ¾	0.67	1.08	1.15	2.09	2.11	2.05
15453	1½ x 1¼ x 1	0.74	1.29	1.18	2.17	2.32	2.09
15483	1½ x 1¼ x 1¼	0.86	1.33	1.13	2.28	2.36	2.17
15448	1½ x 1½ x ½	0.47	0.47	1.10	1.89	1.89	1.85
77462	1½ x 1½ x ¾	0.66	0.66	1.14	2.09	2.09	2.05
77467	1½ x 1½ x 1	0.74	0.74	1.18	2.17	2.17	2.09
77472	1½ x 1½ x 1¼	0.86	0.86	1.13	2.28	2.28	2.17
77477	2 x 2 x 2	1.37	1.37	1.37	2.95	2.95	2.95
15518	2 x 1¼ x 1¼	0.94	1.84	1.33	2.52	2.87	2.36
15513	2 x 1½ x ¾	0.70	1.25	1.38	2.28	2.68	2.28
15498	2 x 1½ x 1	0.82	1.45	1.38	2.40	2.87	2.28
15508	2 x 1½ x 1¼	0.94	1.55	1.49	2.52	2.97	2.52
15503	2 x 1½ x 1½	1.13	1.65	1.37	2.72	3.07	2.80
22228	2 x 1½ x 2	1.38	1.89	1.38	2.95	3.33	2.95
15538	2 x 2 x ½	0.54	0.54	1.30	2.13	2.13	2.05
94777	2 x 2 x ¾	0.79	0.79	1.26	2.37	2.37	2.17
94772	2 x 2 x 1	0.91	0.91	1.30	2.49	2.49	2.21
77487	2 x 2 x 1¼	1.04	1.04	1.37	2.62	2.62	2.40
77482	2 x 2 x 1½	1.13	1.13	1.37	2.72	2.72	2.80

Viega ProPress Tee P x P x P - Model 0918XL



Part No.	Size 1 2 3	A (in)	A1 (in)	A2 (in)	L (in)	L1 (in)	L2 (in)
20684	2½ x ¾ x 2½	1.83	1.91	3.23	3.52	3.60	4.13
20689	2½ x 1 x 2½	1.83	1.91	3.25	3.52	3.60	4.15
20694	2½ x 1¼ x 2½	1.83	1.91	3.20	3.52	3.60	4.23
20699	2½ x 1½ x 2½	1.83	1.91	3.14	3.52	3.60	4.57
20704	2½ x 2 x ¾	1.04	1.61	1.59	2.74	2.52	3.17
20709	2½ x 2 x 1	1.04	1.77	1.65	2.74	2.67	3.24
22283	2½ x 2 x 1½	1.30	1.78	2.07	2.99	3.20	3.66
22278	2½ x 2 x 2	1.50	1.78	2.25	3.19	3.36	3.83
20714	2½ x 2 x 2½	1.83	1.91	2.41	3.52	3.60	4.00
22303	2½ x 2½ x ½	0.91	1.52	0.91	2.60	2.27	2.60
22298	2½ x 2½ x ¾	0.91	1.58	0.91	2.60	2.48	2.60
22293	2½ x 2½ x 1	1.04	1.77	1.04	2.74	2.68	2.74
22288	2½ x 2½ x 1¼	1.16	1.76	1.16	2.85	2.79	2.85
20803	2½ x 2½ x 1½	1.30	1.78	1.30	2.99	3.21	2.99
20688	2½ x 2½ x 2	1.54	1.75	1.54	3.23	3.34	3.23
20683	2½ x 2½ x 2½	1.83	1.94	1.83	3.52	3.63	3.52
20719	3 x ¾ x 3	2.07	2.15	3.82	4.04	4.11	4.72
20724	3 x 1 x 3	2.07	2.15	3.96	4.04	4.11	4.86
20729	3 x 1¼ x 3	2.07	2.15	3.83	4.04	4.11	4.86
20727	3 x 1½ x 3	2.07	2.15	3.71	4.04	4.11	5.14
20732	3 x 2 x 2	1.56	2.03	2.33	3.52	3.61	3.92
20734	3 x 2 x 2½	1.85	2.15	2.63	3.82	3.85	4.21
20739	3 x 2 x 3	2.07	2.15	2.84	4.04	4.11	4.43
20744	3 x 2½ x 2	1.56	2.03	2.07	3.52	3.61	3.76
20749	3 x 2½ x 2½	1.85	2.15	2.56	3.82	3.85	4.25
20754	3 x 2½ x 3	2.07	2.15	2.78	4.04	4.11	4.47
20759	3 x 3 x ½	0.93	1.76	0.93	2.89	2.50	2.89
22323	3 x 3 x ¾	0.93	1.80	0.93	2.89	2.71	2.89
22308	3 x 3 x 1	1.06	2.02	1.06	3.03	2.92	3.03
22313	3 x 3 x 1¼	1.18	2.01	1.18	3.15	3.04	3.15
20798	3 x 3 x 1½	1.32	2.03	1.32	3.29	3.45	3.29
20698	3 x 3 x 2	1.56	2.00	1.56	3.52	3.59	3.52
20703	3 x 3 x 2½	1.85	2.15	1.85	3.82	3.85	3.82
20693	3 x 3 x 3	2.07	2.21	2.07	4.04	4.18	4.04
20774	4 x 3 x 2	1.59	2.57	3.33	3.96	4.15	5.22

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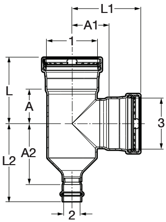
Viega ProPress Tee P x P x P - Model 0918XL



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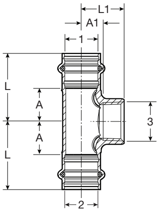
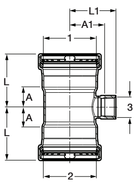
Part No.	Size 1 2 3	A (in)	A1 (in)	A2 (in)	L (in)	L1 (in)	L2 (in)
20784	4 x 3 x 3	2.11	2.66	3.84	4.47	4.63	5.81
20788	4 x 4" x ½	1.08	2.24	1.08	3.45	2.99	3.45
20793	4 x 4 x ¾	1.08	2.32	1.08	3.45	3.22	3.45
20794	4 x 4 x 1	1.36	2.52	1.36	3.72	3.42	3.72
20795	4 x 4 x 1¼	1.36	2.50	1.36	3.72	3.54	3.72
20808	4 x 4 x 1½	1.36	2.52	1.36	3.72	3.95	3.72
20713	4 x 4 x 2	1.59	2.53	1.59	3.96	4.11	3.96
20718	4 x 4 x 2½	1.89	2.65	1.89	4.25	4.35	4.25
20723	4 x 4 x 3	2.11	2.69	2.11	4.47	4.65	4.47
20708	4 x 4 x 4	2.60	2.72	2.60	4.96	5.09	4.96

Viega ProPress Tee Zero Lead Bronze P x P x FPT - Model 2917.2ZL



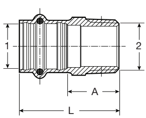
Part No.	Size (in) 1 2 3	A (in)	A1 (in)	L (in)	L1 (in)
79580	½ x ½ x ½ FPT	0.79	0.69	1.61	1.30
79585	¾ x ¾ x ¼ FPT	0.67	0.79	1.57	1.18
79590	¾ x ¾ x ½ FPT	0.79	0.88	1.69	1.42
79595	¾ x ¾ x ¾ FPT	0.91	0.59	1.81	1.14
79760	1 x 1 x ½ FPT	0.79	1.04	1.69	1.57
79765	1 x 1 x ¾ FPT	0.91	1.06	1.81	1.61
79770	1¼ x 1¼ x ½ FPT	0.83	1.16	1.85	1.69
79775	1¼ x 1¼ x ¾ FPT	0.95	1.18	1.97	1.73
79780	1½ x 1½ x ½ FPT	0.87	1.24	2.28	1.77
79785	1½ x 1½ x ¾ FPT	0.94	1.30	2.36	1.85
79790	2 x 2 x ½ FPT	0.98	1.59	2.56	2.13
79795	2 x 2 x ¾ FPT	1.06	1.65	2.64	2.20

Viega ProPress Tee P x P x FPT - Model 0917.2XL



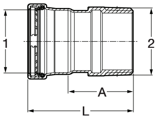
Part No.	Size 1 2 3	A (in)	A1 (in)	L (in)	L1 (in)
20883	2½ x 2½ x ¾ FPT	1.02	1.78	2.72	2.34
20878	2½ x 2½ x 2 FPT	1.54	1.90	3.23	2.60
20893	3 x 3 x ¾ FPT	1.04	2.03	3.01	2.59
20888	3 x 3 x 2 FPT	1.56	2.16	3.52	2.85
20873	4 x 4 x ¾ FPT	1.08	2.53	3.34	3.09
20868	4 x 4 x 2 FPT	1.59	2.69	3.96	3.38

Viega ProPress Adapter Zero Lead Bronze P x MPT - Model 2911ZL



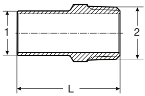
Part No.	Size (in) 1 2	A (in)	L (in)
79210	½ x ⅜ MPT	0.77	1.59
79215	½ x ½ MPT	0.89	1.71
79220	½ x ¾ MPT	1.00	1.83
79225	¾ x ½ MPT	1.02	1.93
79230	¾ x ¾ MPT	1.02	1.93
79235	¾ x 1 MPT	1.18	2.09
79240	1 x ¾ MPT	1.18	2.09
79245	1 x 1 MPT	1.26	2.17
79250	1 x 1¼ MPT	1.54	2.44
79255	1¼ x 1 MPT	1.22	2.24
79260	1¼ x 1¼ MPT	1.34	2.36
79265	1¼ x 1½ MPT	1.48	2.50
79270	1½ x 1¼ MPT	1.34	2.76
79275	1½ x 1½ MPT	1.28	2.70
79280	1½ x 2 MPT	1.65	3.07
79285	2 x 1½ MPT	1.54	3.11
79290	2 x 2 MPT	1.50	3.07

Viega ProPress Adapter P x MPT - Model 0911XL



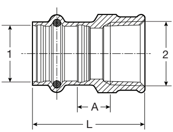
Part No.	Size (in) 1 2	A (in)	L (in)
20823	2½ x 2½ MPT	2.76	4.45
20828	3 x 3 MPT	2.84	4.80
20838	4 x 4 MPT	3.10	5.46

Viega ProPress Adapter Zero Lead Bronze FTG x MPT - Model 2911.1ZL



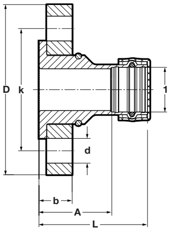
Part No.	Size (in) 1 2	L (in)
79375	½ x ⅜ MPT	1.75
79380	½ x ½ MPT	1.95
79385	½ x ¾ MPT	2.05
79390	¾ x ½ MPT	1.93
79395	¾ x ¾ MPT	2.05
79400	1 x ¾ MPT	2.05
79405	1 x 1 MPT	2.22
79410	1¼ x 1¼ MPT	2.54
79415	1½ x 1½ MPT	2.89
79420	2 x 2 MPT	3.33

Viega ProPress Adapter Zero Lead Bronze P x FPT - Model 2912ZL



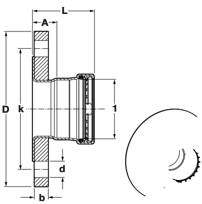
Part No.	Size (in) 1 2	A (in)	L (in)
79295	½ x ⅜ FPT	0.19	1.42
79300	½ x ½ FPT	0.25	1.61
79305	½ x ¾ FPT	0.27	1.65
79310	¾ x ½ FPT	0.33	1.77
79315	¾ x ¾ FPT	0.35	1.81
79320	1 x ½ FPT	0.41	1.85
79325	1 x ¾ FPT	0.39	1.85
79330	1 x 1 FPT	0.44	2.01
79335	1 x 1¼ FPT	0.50	2.09
79340	1¼ x ½ FPT	0.37	1.93
79345	1¼ x 1 FPT	0.24	1.93
79350	1¼ x 1¼ FPT	0.34	2.05
79355	1¼ x 1½ FPT	0.42	2.13
79360	1½ x 1¼ FPT	0.26	2.36
79365	1½ x 1½ FPT	0.34	2.44
79370	2 x 2 FPT	0.41	2.68

Viega ProPress Adapter Flange Zero Lead Bronze P x Flange - Model 2959.5ZL



Part No.	Size (in) 1	A (in)	L (in)	b (in)	D (in)	k (in)	d (in)
79680	1	1.85	2.76	0.84	4.33	3.11	0.63
79685	1¼	1.73	2.76	0.84	4.53	3.50	0.63
79690	1½	1.65	3.07	0.84	4.92	3.86	0.63
79695	2	2.09	3.66	0.84	5.91	4.76	0.75

Viega ProPress Adapter Flange P x Flange - Model 0959.5XL



Part No.	Size (in) 1	A (in)	L (in)	b (in)	k (in)	D (in)	d (in)
20853	2½	1.09	2.79	0.70	5.51	7.09	0.75
20858	3	1.20	3.17	0.79	5.98	7.48	0.75

viega

Frequently Asked Questions

Q What does "Zero Lead" mean?

A "Zero Lead" identifies Viega products meeting the lead-free requirements of the federal amendment to the Safe Drinking Water Act effective January 4th, 2014.

Q What does "Lead Free" mean?

A The Reduction of Lead in Drinking Water Act 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?

A NSF-61 requires wetted parts to be evaluated per NSF-372 and meet a 0.25% weighted average lead content standard. Only products certified to zero lead standards (NSF-61 or NSF-372) can be used in potable water systems. This is in addition to NSF-61 certification.

Q What is a wetted surface?

A "Wetted surface" refers to any and all parts of a valve or fitting that are directly in contact with potable water.

Q Are Viega ProPress valves and fittings "Lead Free"?

A Yes. Viega ProPress fittings and valves are available with Zero Lead and are listed to NSF/ANSI 61 and 372.

Q What materials are used to produce Viega ProPress Zero Lead fittings?

A Viega ProPress Zero Lead bronze fittings are constructed of:
UNS – C87710 and UNS – C87700.

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

A When soldering near a Viega 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 Viega 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 inspectors 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 H1 food grade, silicone-based lubricant registered with NSF and the USDA. 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.

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

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

Frequently Asked Questions

Q What is the warranty for Viega ProPress?

A Viega ProPress fittings installed in non-industrial, non-marine environments 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 should be re-pressed to restore the resistance to rotational movement.

Q How do Viega 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 Can a user solder the female "P" end of a Viega 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 Viega ProPress fittings?

A 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 Viega ProPress Installation Manual.

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

A In general, Viega 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 fully inserted 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 Viega ProPress compatible with the cleaning agents used to disinfect a new plumbing system?

A Yes, ProPress is compatible with system disinfection per model plumbing codes. For disinfection using other concentrations or contact times, contact a Viega District Manager or Technical Support.

Viega 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 as 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.

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Broomfield, CO 80021

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PG-PP 724604 1219 ProPress Systems