Connected in quality.

VIEGA PROPRESS® SYSTEMS

POCKET GUIDE

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viega

Viega.

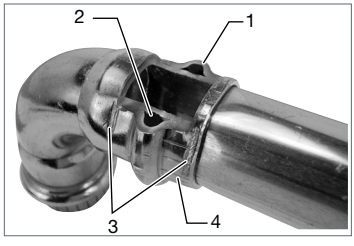
Connected in quality.

Building on Tradition

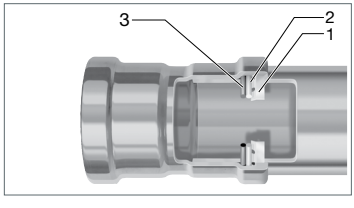
Founded 125 years ago, Viega is a privately owned international group of companies. In the United States, Canada, Mexico, and Latin America, Viega specializes in plumbing, heating, and pipe-joining technologies. The values of Viega's founder, Franz-Anselm Viegener, are just as present today as they were when he started the company in 1899. Courage, passion, and innovative spirit are still the basics of Viega's foundation.

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 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 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 physical separation during installation and later during pressing.
3. The EPDM sealing element ensures watertight or airtight connections.

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

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According to NSF and EPA Title 40 Ch1.D.141: Use of this material may not be appropriate in all water chemistries. Copper [tube, pipe, or fitting] may require corrosion control to limit the leaching of copper into drinking water under certain water chemistries. Refer to Section I-1.1 of NSF/ANSI/CAN 61 for the water quality considerations to be used before installing this product.

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.

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 electrohydraulic 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 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 fitting's design, 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 reliable, leakproof connection.

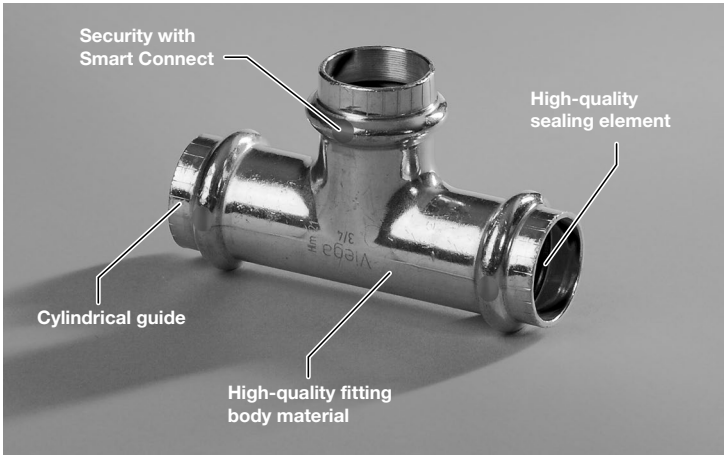
Unpressed connections are located by pressurizing the system with air or water. When testing with water, the proper pressure range is 15 to 85 psi. Pressure testing with air can be dangerous at high pressures. When testing with compressed air, the proper pressure range is ½ to 45 psi. Following a successful 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.

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

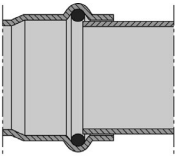
1 Identify an unpressed connection during pressure testing when air or water flows past the sealing element.

2 Upon identification, use the press tool to press the fitting, making a secure, leakproof connection.

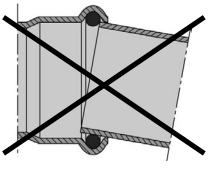
3 Viega ProPress connections are fast, flameless, and reliable.



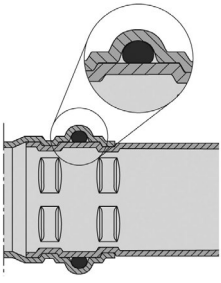
Cylindrical Guides



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 leaving 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 1¼". Temper H58, known as "hard copper", may be used with nominal sizes ½" to 4".

When pressing onto B75 copper tube, additional considerations apply.
See *Viega ProPress Copper Tube Compatibility Tech Data*, page 7.

Viega ProPress fittings are available in elbows, couplings, reducers, tees, reducing tees, threaded adapters, unions, caps, and flanges.

Components
- Alloy: Copper alloy – UNS C12200, Zero Lead silicon bronze alloy – C87710 (cast) or C8770 (machined)
- Peroxidically cured EPDM sealing element
- 420 stainless steel grip ring for 2½" to 4" fittings
- PBT separator ring for 2½" to 4" fittings

Operating Parameters
- Operating Pressure: 300 psi maximum
- Test Pressure: 600 psi maximum
- Operating Temperature: 0°F to 250°F

Listings and Certificates
- NSF®-61
- NSF®-372
- IAPMO/ANSI/CAN Z1117
- ICC-ES LC1002
- ABS
- CSA Low Lead Content
- ASME B16.51
- ASTM F3226
- FM Class 1920

CAUTION!
Listings, certifications, and approvals are shown for reference only and may not cover every item in the product line. They are subject to change, with the most current official listing located at the appropriate agency's portal.

Compliant With:
- ASME B31, B31.1, B31.3, B31.9
- ASTM 1029
- ASTM B75
- ASTM B88
- 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)

Contact your local Viega representative for details on local approvals.

Approved Applications:
- Hot and cold potable water
- Rainwater/gray water
- Chilled water
- Hydronic heating (with glycol)
- Low-pressure steam (15 psi maximum) with FKM sealing element swap
- Residential steam (5 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.

Smart Connect Technology
ProPress fittings are manufactured with Viega's unique Smart Connect technology. Designed into the fitting itself, Viega Smart Connect technology allows identification of an unpressed fitting during pressure testing.

The use of the system for applications other than those listed or outside these parameters must be approved by Viega Technical Support (techsupport@viega.us).

Viega ProPress Copper Tube Compatibility

Description
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 1¼". 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 the tables below. Only tempers H58, O60, and O50 may be used with ProPress.

It is the responsibility of the system designer to understand all applicable codes and standards. B75 tubing may not conform to code compliance in all areas or under all Viega listings. These standards may include but are not limited to ASME B16.51.

B75 Annealed Tube Dimensions Compatible with ProPress

B75 O60 Soft Anneal and O50 Light Anneal				
Nominal (in)	OD (in)	TOL_{OD} (in)	Wall Max (in)	Wall Min (in)
½	0.625	0.0025	0.054	0.025
¾	0.875	0.0030	0.071	0.029
1	1.125	0.0035	0.071	0.031
1¼	1.375	0.0040	0.071	0.038

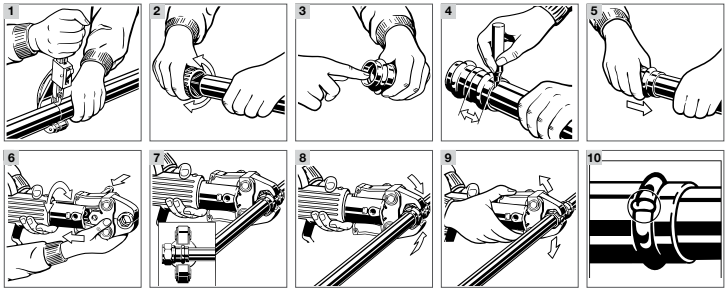
B75 Drawn Tube Dimensions Compatible with ProPress

B75 H58 Drawn (General)				
Nominal (in)	OD (in)	TOL_{OD} (in)	Wall Max (in)	Wall Min (in)
½	0.625	0.0010	0.054	0.025
¾	0.875	0.0010	0.071	0.029
1	1.125	0.0015	0.071	0.031
1¼	1.375	0.0015	0.071	0.038
1½	1.625	0.0020	0.079	0.044
2	2.125	0.0020	0.091	0.052
2½	2.625	0.0020	0.105	0.059
3	3.125	0.0020	0.120	0.065
4	4.125	0.0020	0.147	0.085

It is the responsibility of the system designer to understand all applicable codes and standards. B75 tubing may not conform to code compliance in all areas or under all Viega listings. These standards may include but are not limited to ASME B16.51 and IAPMO/ANSI/CAN Z1117.

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. Cut tubing a minimum of 4" 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. Use only Viega sealing elements.

For applications requiring Viega ProPress with FKM or HNBR sealing elements, remove the factory-installed EPDM sealing element and replace with an FKM or HNBR sealing element. See *Changing Sealing Elements* on page 10.

4 Mark the proper insertion depth (see table below). Improper insertion depth may result in improper seal. It is recommended that the depth marking be visible on the completed assembly.

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

Copper tubing must be free of surface imperfections, including metal stamped print lines, before a ProPress fitting is installed.

5 While turning slightly, slide press fitting onto tubing to the marked depth. End of tubing must contact stop. Once the assembly is completed, it is recommended that the depth marking still be visible.

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.

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

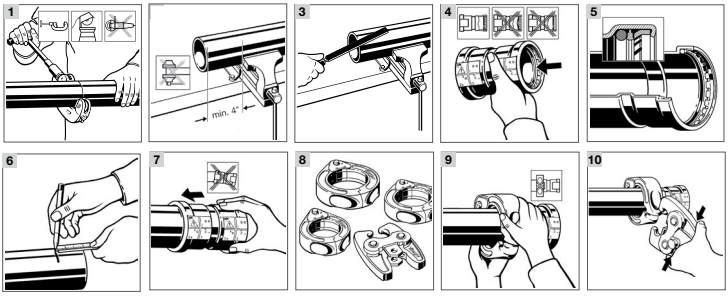
8 Hold trigger on press tool until press jaws have fully engaged the fitting. Jaws will automatically release after a full press is made.

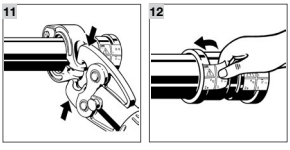
9 After pressing, open the jaw and remove the press tool.

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.

Viega ProPress 2½" to 4" Fittings

For Hard Copper Tubing in 2½" to 4"





1 Cut 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. Ensure sealing element is free of cuts and damage. Do not use oils or lubricants.

For applications requiring Viega ProPress with FKM or HNBR sealing elements, remove the factory-installed EPDM sealing element and replace with an FKM or HNBR sealing element. See *Changing Sealing Elements* on page 10.

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

6 Mark the proper insertion depth (see chart below). Improper insertion depth may result in an improper seal. It is recommended that the depth marking be visible on the completed assembly.

ProPress 2½" to 4" Minimum Insertion Depth			
Tube Size	2½"	3"	4"
Insertion Depth	$1\frac{11}{16}$"	$1\frac{15}{16}$"	2⅜"

7 While turning slightly, slide press fitting onto tubing to the marked depth. End of tubing must contact stop. Once the assembly is completed, it is recommended that the depth marking still be visible.

8 ProPress 2½" to 4" fitting connections must be performed with rings that are compatible with fittings. Do not mix actuators and rings from different manufacturers.

CAUTION!
Use only rings that are compatible with ProPress 2½" to 4" fittings.

9 Open the XL-C ring and place at right angles on the fitting. XL-C ring must be engaged on the fitting bead. Check insertion depth.

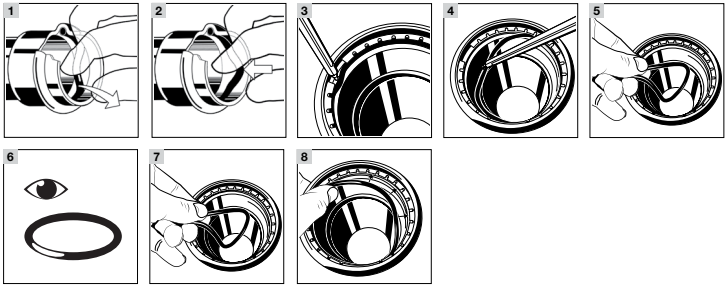
10 With V2 actuator inserted into the tool, open the V2 actuator as shown and connect V2 actuator to the XL-C ring.

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

12 Remove tag from fitting, indicating that the press has been performed.

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.

Changing Sealing Elements



Changing Sealing Elements

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.**

WARNING!
Do not use sharp objects to remove the sealing element, as this may damage the seal.

To change sealing elements for ½" to 2" fittings, follow steps 1 and 2. For 2½" to 4" fittings, follow steps 3 through 10.

½" to 2" Fittings

1 Remove the sealing element from the bead using a blunt object such as a finger or an O-ring pick.
2 Insert new, undamaged sealing element into the bead. Check to make sure the whole sealing element is in the bead.

2½" to 4" Fittings

3 Insert O-ring pick between sealing element and separator ring.
4 Use O-ring pick to push the sealing element into the fitting below the grip ring.
5 Carefully reach past the grip ring, pinch and remove the sealing element from the fitting.

WARNING!
Grip ring is extremely sharp; use gloves or extreme caution when reaching into fitting.

CAUTION!
If reusing the sealing element ensure the sealing element does not make contact with grip ring as this can cause damage.

6 Visually inspect replacement sealing element. Ensure it is free of debris; there are no defects, scratches, or burrs; and is coated with lubricant.
7 Pinch the sealing element and place it fully inside the fitting, below the separator and grip rings.
8 Carefully pull the sealing element up into the channel below the separator ring. Ensure proper concentric seating of grip ring, separator ring, and sealing element before installation.

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	300 Fittings 250 Valves	See note [3]	✓		
Rainwater / Graywater				✓	✓	
Chilled water	≤50% ethylene/propylene glycol			✓	✓	
Hydronic heating water[9]	≤50% ethylene/propylene glycol			✓	✓	
Steam	Low pressure	15	Max 250°		✓[4]	
	Residential	5	Max 227°	✓[4]	✓[4]	
Fuels/Oils/Lubricants						
Ethanol	Pure grain alcohol	200	Ambient[5]	✓		
Lube oil[10]	Petroleum based		Max 150°			✓
Heating fuel oil[10]		125	Max 100°			✓
Diesel fuel[10]						✓
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				✓	✓	✓
Ammonia	Ammonia environment[7]		Max 120°	✓	✓	✓
Oxygen – O_2	Non-medical Keep free of oil and grease	140	Max 140°	✓		
Hydrogen – H_2		125		✓	✓	✓
Vacuum	Minimum absolute pressure Maximum differential pressure	750µm Hg 29.2" 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 must contain adequate condensate drainage.

[5] Ambient temperatures should be taken as normal operating conditions in order for the applications not to exceed sealing element limitations.

[6] Compliant with CSA 6.32 / ANSI LC-4.

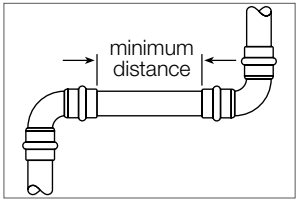
[7] All copper or copper alloy components that are exposed in ammonia environments require lacquer or paint coating.

[9] It is a Viega engineering best practice that for heating applications using EPDM – where the media will be running continuously, non-stop at 200°F or above – to consider switching to an FKM sealing element.

[10] Not approved for use in Canada.

Minimum Clearance Between Two Viega Press Connections

Viega ProPress		
Tubing Diameter (in)	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 (in)	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 (in)	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 sprinklers, 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, or 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* on page 10. FKM is well known for its excellent resistance to petroleum products and solvents as well as for its exceptional high-temperature performance, which makes it ideal for seals and gaskets in solar, district heating, low-pressure steam, and compressed-air systems.

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* on page 10. 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

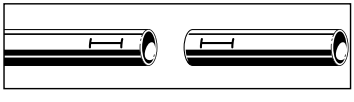
HNBR is widely known for its physical strength and for retention of its properties after long-term exposure to heat, oil, and chemicals.

The unique properties of the HNBR sealing element have resulted in its wide adoption for 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.



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	1 3/16	30
1½	1 7/16	37	1 9/16	40
2	1 9/16	40	1¾	44
2½	1 11/16	43	2⅝	67
3	1 15/16	50	2 15/16	75
4	2⅜	60	3 7/16	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	1 7/16	37	3 5/16	84
2	1 9/16	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 from the Authority Having Jurisdiction prior to installation.

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 by 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.

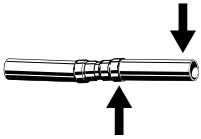
Rotating a Pressed Fitting
Once a ProPress fitting has been pressed, it can be rotated (not by hand); but once rotated more than five degrees, the fitting should be re-pressed to restore resistance to rotational movement. If the fitting is re-pressed, care should be taken to align the flat sides on the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

Deflection

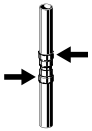
The pressing process can cause deflection (angular misalignment) to occur. When pressing Viega ProPress fittings in a system, the deformation of the fitting is constant. This allows for a consistent leak-free joint every time and is a result of the pressing technique.

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 struts and clamps, deflection is minimized and nearly eliminated, depending on clamp spacing.



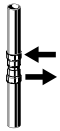
Controlling Deflection
Deflection while pressing can be minimized by utilizing the following installation practices.

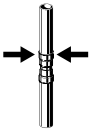


Alternate Press Directions
- Press one end of fitting.
- Make second press on other end of fitting from the opposite side.

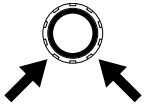
Push-Pull Method
- Rings = Push on press tool.
- Jaws = Pull on press tool.

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.



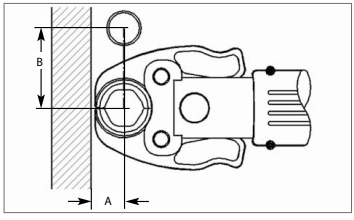
- When pressing overhead piping, it may be inconvenient to alternate sides for each press.
- The natural weight of the piping plus pressing on opposite sides at a 45-degree angle should adequately eliminate deflection.
- This technique can also be used for any horizontal piping and when working above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

Tool Clearances

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

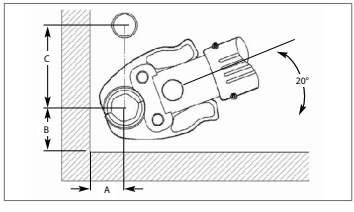
Ensure that the space required for system pressing tools is available if Viega ProPress fittings will be installed immediately upstream or downstream from wall or floor penetrations.

ProPress Standard Jaw Clearance



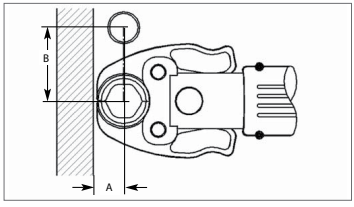
Tube Diameter	A minimum	B minimum
½"	¾"	1⅝"
¾"	⅞"	2⅛"
1"	1"	2½"
1¼"	1⅛"	2⅞"
1½"	1¾"	3½"
2"	2"	4⅜"

ProPress Standard Jaw Clearance Between Tube, Wall, and Floor



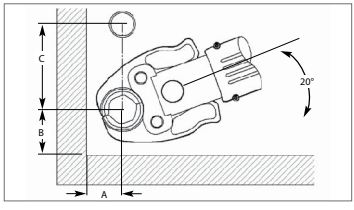
Tube Diameter	A minimum	B minimum	C minimum
½"	⅞"	1⅜"	2½"
¾"	1"	1½"	2½"
1"	1⅛"	1¾"	3"
1¼"	1¼"	2¼"	3⅛"
1½"	1⅞"	2½"	3¾"
2"	2⅛"	3⅛"	5"

ProPress Compact Jaw Clearance



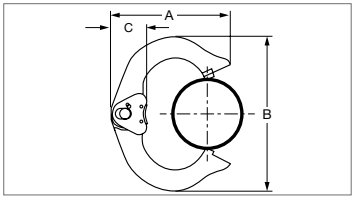
Tube Diameter	A minimum	B minimum
½"	¾"	2"
¾"	⅞"	2⅜"
1"	⅞"	2⅝"
1¼"	1⅛"	3⅛"

ProPress Compact Jaw Clearance Between Tube, Wall, and Floor



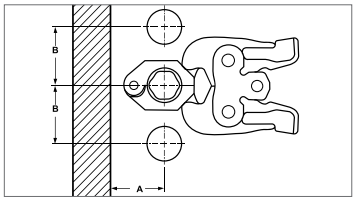
Tube Diameter	A minimum	B minimum	C minimum
½"	⅞"	1⅜"	2½"
¾"	1"	1½"	2¾"
1"	1⅛"	1⅝"	3"
1¼"	1⅝"	2⅛"	3⅜"

ProPress Ring 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

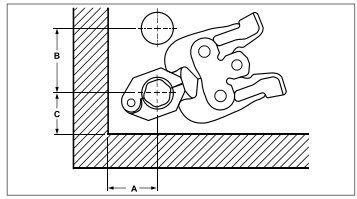


Tube Diameter	A minimum	B minimum
½"	1⅝"	2 3/16"
¾"	1¾"	2 3/16"
1"	2"	1⅝"
1¼"	2 3/16"	2 15/16"

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"

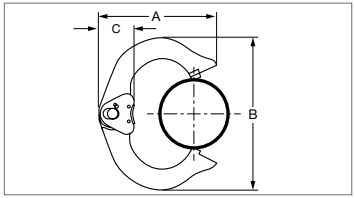
ProPress Rings With V2 Actuator Clearance Between Tube, Wall, and Floor

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

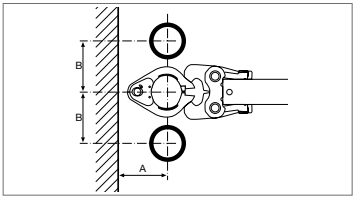
Tube Diameter	A minimum	B minimum	C minimum
½"	1⅝"	3¼"	2"
¾"	1¾"	3¼"	1⅞"
1"	2"	3¼"	1⅞"
1¼"	2 3/16"	3⅜"	1⅞"

ProPress XL-C Ring Dimensions



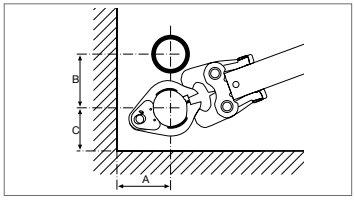
Tube Diameter	A minimum	B minimum	C minimum
2½"	6 3/16"	6 15/16"	2 7/16"
3"	7 7/16"	8 13/16"	2 7/16"
4"	8 1/16"	10 7/16"	2 7/16"

ProPress XL-C Ring Clearance



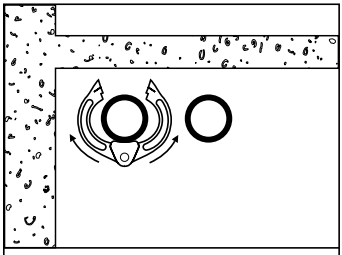
Tube Diameter	A minimum	B minimum
2½"	4 1/8"	6"
3"	4 3/8"	7"
4"	5"	8"

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

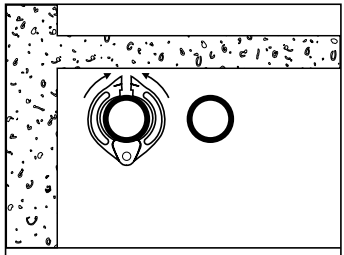


Tube Diameter	A minimum	B minimum	C minimum
2½"	4 1/8"	6"	4½"
3"	4 3/8"	7"	4 7/8"
4"	5"	8"	5¾"

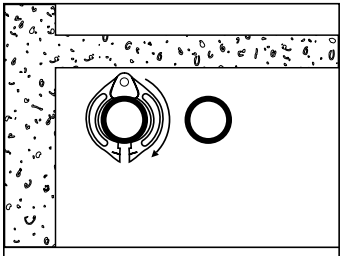
Pressing with Ring and Actuator in Tight Quarters



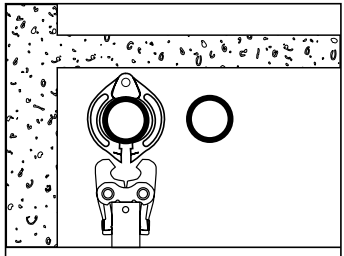
1. Wrap the actuator ring around the press fitting with the opening facing away from you.



2. Close the actuator tight around the fitting.



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

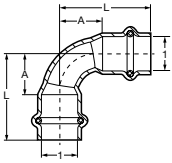


4. Properly insert press jaws and begin the press-fitting procedure.

Dimensional Documentation

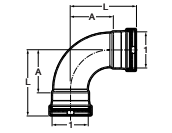
ProPress Fittings

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



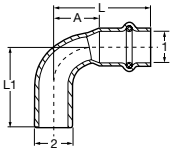
Part No.	Size (in)		A (in)		L (in)	
	1	1	Dec	Frac	Dec	Frac
77317	½ x ½		0.75	¾	1.50	1½
77022	¾ x ¾		0.76	¾	1.67	1 11/16
77027	1 x 1		1.28	1¼	2.19	2 3/16
77032	1¼ x 1¼		1.28	1¼	2.31	2 5/16
77037	1½ x 1½		1.29	1 5/16	2.72	2¾
77042	2 x 2		2.16	2 3/16	3.74	3¾

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



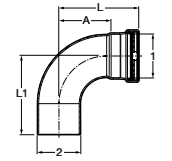
Part No.	Size (in)		A (in)		L (in)	
	1	1	Dec	Frac	Dec	Frac
20623	2½ x 2½		3.19	3 3/16	4.88	4⅞
20628	3 x 3		3.76	3¾	5.73	5¾
20633	4 x 4		4.90	4⅞	7.26	7¼

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



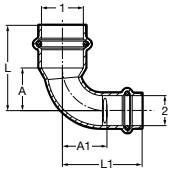
Part No.	Size (in)		A (in)		L (in)		L1 (in)	
	1	2	Dec	Frac	Dec	Frac	Dec	Frac
77347	½ x ½		0.75	¾	1.50	1½	1.54	1 9/16
77052	¾ x ¾		0.76	¾	1.67	1 11/16	1.83	1 13/16
77057	1 x 1		1.28	1¼	2.19	2 3/16	2.27	2¼
77062	1¼ x 1¼		1.28	1¼	2.31	2 5/16	2.48	2½
77067	1½ x 1½		1.29	1 5/16	2.72	2¾	2.80	2 13/16
77072	2 x 2		2.16	2 3/16	3.74	3¾	3.78	3¾

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



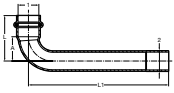
Part No.	Size (in)		A (in)		L (in)		L1 (in)	
	1	2	Dec	Frac	Dec	Frac	Dec	Frac
20638	2½ x 2½		3.19	3 3/16	4.88	4⅞	4.80	4 13/16
20643	3 x 3		3.76	3¾	5.73	5¾	5.63	5⅝
20648	4 x 4		4.90	4⅞	7.26	7¼	7.13	7⅛

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



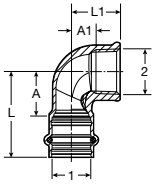
Part No.	Size (in)		A (in)		A1 (in)		L (in)		L1 (in)	
	1	2	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac
77325	¾ x ½		0.91	15/16	0.94	15/16	1.81	1 13/16	1.69	1 11/16
77330	1 x ¾		1.20	1 3/16	1.30	1 5/16	2.11	2⅛	2.21	2 3/16

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



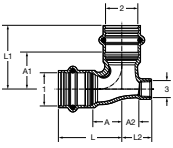
Part No.	Size (in)		A (in)		L (in)		L1 (in)	
	1	2	Dec	Frac	Dec	Frac	Dec	Frac
77353	¾ x ¾		1.02	1	1.93	1 15/16	5.98	6

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



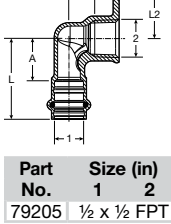
Part No.	Size (in)		A (in)		A1 (in)		L (in)		L1 (in)	
	1	2	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac
79520	½ x ⅜ FPT		0.94	15/16	0.42	7/16	1.77	1¾	0.83	13/16
79525	½ x ½ FPT		0.94	15/16	0.57	9/16	1.77	1¾	1.10	1⅛
79530	½ x ¾ FPT		1.06	1 1/16	0.51	½	1.89	1⅞	1.06	1 1/16
79535	¾ x ½ FPT		1.06	1 1/16	0.65	⅝	1.97	2	1.18	1 3/16
79540	¾ x ¾ FPT		1.06	1 1/16	0.57	9/16	1.97	2	1.12	1⅛
79545	1 x ½ FPT		1.06	1 1/16	0.72	¾	1.97	2	1.26	1¼
79550	1 x 1 FPT		1.34	1 5/16	0.76	¾	2.24	2¼	1.42	1 7/16
79560	1¼ x 1¼ FPT		1.54	1 9/16	0.89	⅞	2.56	2 9/16	1.57	1 9/16
79565	1½ x 1½ FPT		1.69	1 11/16	1.05	1 1/16	3.11	3⅛	1.73	1¾
79570	2 x 2 FPT		2.17	2 3/16	1.35	1⅜	3.74	3¾	2.05	2 1/16

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



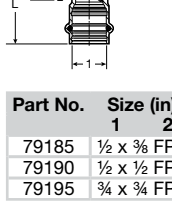
Part No.	Size (in)			A (in)		A1 (in)		A2 (in)		L (in)		L1 (in)		L2 (in)	
	1	2	3	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac
79635	½ x ½ x ⅛ FPT			0.67	11/16	0.67	11/16	0.44	7/16	1.50	1½	1.50	1½	0.71	11/16
79640	¾ x ¾ x ⅛ FPT			0.83	13/16	0.83	13/16	0.54	9/16	1.73	1¾	1.73	1¾	0.81	13/16

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



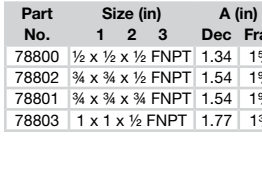
Part No.	Size (in) 1	2	A (in) Dec	Frac	A1 (in) Dec	Frac	L (in) Dec	Frac	L1 (in) Dec	Frac	L2 (in) Dec	Frac
79205	½ x ½ FPT		0.94	15⁄16	0.57	9⁄16	1.77	1¾	1.10	1⅛	1.07	1 1⁄16

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



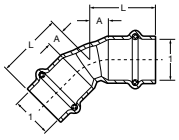
Part No.	Size (in) 1	2	A (in) Dec	Frac	L (in) Dec	Frac	L1 (in) Dec	Frac	L2 (in) Dec	Frac	L3 (in) Dec	Frac
79185	½ x ⅜ FPT		0.94	15⁄16	1.77	1¾	0.74	¾	0.83	3⁄16	0.67	11⁄16
79190	½ x ½ FPT		0.94	15⁄16	1.77	1¾	0.74	¾	1.10	1⅛	0.67	11⁄16
79195	¾ x ¾ FPT		1.06	1 1⁄16	1.97	2	0.83	13⁄16	1.12	1⅛	0.83	13⁄16

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



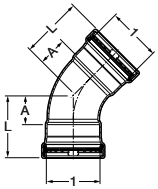
Part No.	Size (in) 1	2	3	A (in) Dec	Frac	L (in) Dec	Frac	L1 (in) Dec	Frac	L2 (in) Dec	Frac	L3 (in) Dec	Frac	L4 (in) Dec	Frac
78800	½ x ½ x ½ FNPT			1.34	1 5⁄16	2.17	2 3⁄16	1.97	2	1.10	1⅛	0.67	11⁄16	1.57	1 9⁄16
78802	¾ x ¾ x ½ FNPT			1.54	1 9⁄16	2.44	2 7⁄16	1.97	2	1.10	1⅛	0.83	13⁄16	2.05	2 1⁄16
78801	¾ x ¾ x ¾ FNPT			1.54	1 9⁄16	2.44	2 7⁄16	1.97	2	1.12	1⅛	0.83	13⁄16	1.89	1 7⁄8
78803	1 x 1 x ½ FNPT			1.77	1¾	2.68	2 11⁄16	2.36	2 3⁄8	1.10	1⅛	0.87	⅞	2.52	1½

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



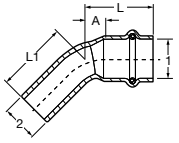
Part No.	Size (in)		A (in)		L (in)	
	1	1	Dec	Frac	Dec	Frac
77607	½ x	½	0.30	5/16	1.04	1 1/16
77023	¾ x	¾	0.36	3/8	1.26	1 1/4
77028	1 x	1	0.47	½	1.38	1 3/8
77033	1¼ x	1¼	0.58	9/16	1.61	1 5/8
77038	1½ x	1½	0.65	5/8	2.08	2 1/16
77043	2 x	2	0.86	7/8	2.44	2 7/16

Viega ProPress 45° P x P – Model 0926XL



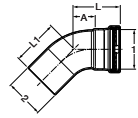
Part No.	Size (in)		A (in)		L (in)	
	1	1	Dec	Frac	Dec	Frac
20653	2½ x	2½	1.48	1½	3.18	3 3/16
20658	3 x	3	1.73	1¾	3.70	3 11/16
20663	4 x	4	1.96	1 15/16	4.63	4 5/8

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



Part No.	Size (in)		A (in)		L (in)		L1 (in)	
	1	2	Dec	Frac	Dec	Frac	Dec	Frac
77637	½ x	½	0.31	5/16	1.06	1 1/16	1.10	1 1/8
77053	¾ x	¾	0.36	3/8	1.26	1 1/4	1.30	1 5/16
77058	1 x	1	0.47	½	1.38	1 3/8	1.49	1 1/2
77063	1¼ x	1¼	0.58	9/16	1.61	1 5/8	1.67	1 11/16
77068	1½ x	1½	0.65	5/8	2.08	2 1/16	2.04	2 1/16
77073	2 x	2	0.86	7/8	2.44	2 7/16	2.54	2 9/16

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



Part No.	Size (in)		A (in)		L (in)		L1 (in)	
	1	2	Dec	Frac	Dec	Frac	Dec	Frac
20668	2½ x	2½	1.48	1½	3.18	3 3/16	3.10	3 1/8
20673	3 x	3	1.73	1¾	3.70	3 11/16	3.60	3 5/8
20678	4 x	4	2.23	2¼	4.59	4 9/16	4.45	4 7/16

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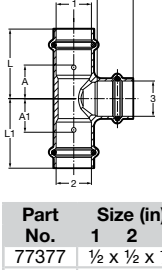
Viega ProPress Tee Copper P x P x P – Model 2918



Part No.	Size (in) 1	2	3	A (in) Dec	A (in) Frac	A1 (in) Dec	A1 (in) Frac	A2 (in) Dec	A2 (in) Frac	L (in) Dec	L (in) Frac	L1 (in) Dec	L1 (in) Frac	L2 (in) Dec	L2 (in) Frac
77377	½	½	½	0.75	¾	0.75	¾	0.50	½	1.50	1½	1.50	1½	1.25	1¼
77382	½	½	¾	0.91	15⁄16	0.91	15⁄16	0.59	9⁄16	1.65	1⅝	1.65	1⅝	1.50	1½
15493	½	½	1	1.10	1⅛	1.10	1⅛	0.55	9⁄16	1.85	1⅞	1.85	1⅞	1.46	1⅞
77387	¾	¾	¾	0.85	⅞	0.85	⅞	0.59	9⁄16	1.75	1¾	1.75	1¾	1.50	1½
77392	¾	½	½	0.69	11⁄16	0.98	1	0.63	⅝	1.59	1 9⁄16	1.73	1¾	1.38	1⅜
77397	¾	½	¾	0.85	⅞	1.14	1 3⁄16	0.59	9⁄16	1.75	1¾	1.89	1⅞	1.50	1½
77402	¾	¾	½	0.69	11⁄16	0.69	11⁄16	0.63	⅝	1.59	1 9⁄16	1.59	1 9⁄16	1.38	1⅜
77407	¾	¾	1	0.97	1	0.97	1	0.63	⅝	1.87	1⅞	1.87	1⅞	1.54	1 9⁄16
77412	1	1	1	0.97	1	0.97	1	0.79	13⁄16	1.87	1⅞	1.87	1⅞	1.69	1 11⁄16
22263	1	½	¾	0.85	⅞	1.24	1¼	0.75	¾	1.76	1¾	1.99	2	1.66	1 11⁄16
94767	1	½	1	0.97	1	1.52	1½	0.79	13⁄16	1.87	1⅞	2.26	2¼	1.69	1 11⁄16
77417	1	¾	½	0.69	11⁄16	0.89	⅞	0.79	13⁄16	1.59	1 9⁄16	1.79	1 13⁄16	1.54	1 9⁄16
77422	1	¾	¾	0.85	⅞	1.04	1 1⁄16	0.75	¾	1.75	1¾	1.95	1 15⁄16	1.65	1⅝
77427	1	¾	1	0.97	1	1.18	1 3⁄16	0.78	¾	1.87	1⅞	2.07	2 1⁄16	1.69	1 11⁄16
77432	1	1	½	0.69	11⁄16	0.69	11⁄16	0.79	13⁄16	1.59	1 9⁄16	1.59	1 9⁄16	1.54	1 9⁄16
77437	1	1	¾	0.85	⅞	0.85	⅞	0.75	¾	1.75	1¾	1.75	1¾	1.65	1⅝
15488	1	1	1¼	1.16	1 3⁄16	1.16	1 3⁄16	0.84	13⁄16	2.07	2 1⁄16	2.07	2 1⁄16	1.87	1⅞
77442	1¼	1¼	1¼	1.02	1	1.02	1	0.86	⅞	2.05	2 1⁄16	2.05	2 1⁄16	1.89	1⅞
22253	1¼	½	1¼	1.02	1	1.77	1¾	0.87	⅞	2.05	2 1⁄16	2.52	2½	1.89	1⅞
22243	1¼	¾	½	0.64	⅝	1.13	1⅛	0.93	15⁄16	1.68	1 11⁄16	2.03	2 1⁄16	1.68	1 11⁄16
22258	1¼	¾	¾	0.76	¾	1.30	1 5⁄16	0.87	⅞	1.80	1 13⁄16	2.21	2 3⁄16	1.78	1¾
22268	1¼	¾	1	0.88	⅞	1.40	1⅜	0.91	15⁄16	1.91	1 15⁄16	2.31	2 5⁄16	1.82	1 13⁄16
22248	1¼	¾	1¼	1.02	1	1.54	1 9⁄16	0.86	⅞	2.05	2 1⁄16	2.45	2 7⁄16	1.89	1⅞
22238	1¼	1	½	0.64	⅝	0.91	15⁄16	0.93	15⁄16	1.68	1 11⁄16	1.82	1 13⁄16	1.68	1 11⁄16
94762	1¼	1	¾	0.76	¾	1.14	1⅛	0.87	⅞	1.79	1 13⁄16	2.05	2 1⁄16	1.77	1¾
14568	1¼	1	1	0.88	⅞	1.28	1¼	0.91	15⁄16	1.91	1 15⁄16	2.19	2 3⁄16	1.81	1 13⁄16
94757	1¼	1¼	½	0.65	⅝	0.65	⅝	0.93	15⁄16	1.67	1 11⁄16	1.67	1 11⁄16	1.67	1 11⁄16
77452	1¼	1¼	¾	0.77	¾	0.77	¾	0.89	⅞	1.79	1 13⁄16	1.79	1 13⁄16	1.77	1¾
77447	1¼	1¼	1	0.88	⅞	0.88	⅞	0.90	⅞	1.91	1 15⁄16	1.91	1 15⁄16	1.81	1 13⁄16
77457	1½	1½	1½	1.13	1⅛	1.13	1⅛	1.13	1⅛	2.56	2 9⁄16	2.56	2 9⁄16	2.56	2 9⁄16
79660	1½	1	¾	0.67	11⁄16	1.39	1⅜	1.16	1 3⁄16	2.17	2 3⁄16	2.44	2 7⁄16	2.05	2 1⁄16
15458	1½	1	1	0.74	¾	1.54	1 9⁄16	1.06	1 1⁄16	2.17	2 3⁄16	2.44	2 7⁄16	1.97	2
15463	1½	1	1½	1.13	1⅛	1.83	1 13⁄16	1.13	1⅛	2.56	2 9⁄16	2.74	2¾	2.56	2 9⁄16
22233	1½	1¼	¾	0.67	11⁄16	1.08	1 1⁄16	1.15	1⅛	2.09	2 1⁄16	2.11	2⅛	2.05	2 1⁄16
15453	1½	1¼	1	0.74	¾	1.29	1 5⁄16	1.18	1 3⁄16	2.17	2 3⁄16	2.32	2 5⁄16	2.09	2 1⁄16

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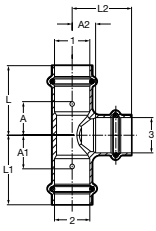
Viega ProPress Tee Copper P x P x P – Model 2918



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Part	Size (in)			A (in)		A1 (in)		A2 (in)		L (in)		L1 (in)		L2 (in)	
No.	1	2	3	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac
15483	1½ x 1¼ x 1¼			0.86	7/8	1.33	1 5/16	1.13	1 1/8	2.28	2 1/4	2.36	2 3/8	2.17	2 3/16
15448	1½ x 1½ x ½			0.47	1/2	0.47	1/2	1.10	1 1/8	1.89	1 7/8	1.89	1 7/8	1.85	1 7/8
77462	1½ x 1½ x ¾			0.66	1 1/16	0.66	1 1/16	1.14	1 1/8	2.09	2 1/16	2.09	2 1/16	2.05	2 1/16
77467	1½ x 1½ x 1			0.74	3/4	0.74	3/4	1.18	1 3/16	2.17	2 3/16	2.17	2 3/16	2.09	2 1/16
77472	1½ x 1½ x 1¼			0.86	7/8	0.86	7/8	1.13	1 1/8	2.28	2 1/4	2.28	2 1/4	2.17	2 3/16
77477	2 x 2 x 2			1.37	1 3/8	1.37	1 3/8	1.37	1 3/8	2.95	2 15/16	2.95	2 15/16	2.95	2 15/16
15518	2 x 1¼ x 1¼			0.94	15/16	1.84	1 13/16	1.33	1 5/16	2.52	2 1/2	2.87	2 7/8	2.36	2 3/8
15513	2 x 1½ x ¾			0.70	1 1/16	1.25	1 1/4	1.38	1 3/8	2.28	2 1/4	2.68	2 11/16	2.28	2 1/4
15498	2 x 1½ x 1			0.82	13/16	1.45	2 7/16	1.38	1 3/8	2.40	2 3/8	2.87	2 7/8	2.28	2 1/4
15508	2 x 1½ x 1¼			0.94	15/16	1.55	1 9/16	1.49	1 1/2	2.52	2 1/2	2.97	3	2.52	2 1/2
15503	2 x 1½ x 1½			1.13	1 1/8	1.65	1 5/8	1.37	1 3/8	2.72	2 3/4	3.07	3 1/16	2.80	2 13/16
22228	2 x 1½ x 2			1.38	1 3/8	1.89	1 7/8	1.38	1 3/8	2.95	2 15/16	3.33	3 5/16	2.95	2 15/16
15538	2 x 2 x ½			0.54	9/16	0.54	9/16	1.30	1 5/16	2.13	2 1/8	2.13	2 1/8	2.05	2 1/16
94777	2 x 2 x ¾			0.79	13/16	0.79	13/16	1.26	1 1/4	2.37	2 3/8	2.37	2 3/8	2.17	2 3/16
94772	2 x 2 x 1			0.91	15/16	0.91	15/16	1.30	1 5/16	2.49	2 1/2	2.49	2 1/2	2.21	2 3/16
77487	2 x 2 x 1¼			1.04	1 1/16	1.04	1 1/16	1.37	1 3/8	2.62	2 5/8	2.62	2 5/8	2.40	2 3/8
77482	2 x 2 x 1½			1.13	1 1/8	1.13	1 1/8	1.37	1 3/8	2.72	2 3/4	2.72	2 3/4	2.80	2 13/16

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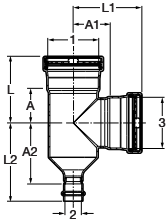
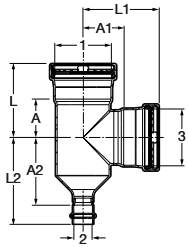
Viega ProPress Tee P x P x P – Model 0918XL



Part No.	Size (in) 1 2 3	A (in) Dec	A (in) Frac	A1 (in) Dec	A1 (in) Frac	A2 (in) Dec	A2 (in) Frac	L (in) Dec	L (in) Frac	L1 (in) Dec	L1 (in) Frac	L2 (in) Dec	L2 (in) Frac
22317	2½ x ¾ x 2½	1.83	1 13/16	1.91	1 15/16	3.35	3⅜	3.52	3½	3.60	3⅝	4.25	4¼
20689	2½ x 1 x 2½	1.83	1 13/16	1.91	1 15/16	3.25	3¼	3.52	3½	3.60	3⅝	4.15	4⅛
20694	2½ x 1¼ x 2½	1.83	1 13/16	1.91	1 15/16	3.20	3 3/16	3.52	3½	3.60	3⅝	4.23	4¼
20699	2½ x 1½ x 2½	1.83	1 13/16	1.91	1 15/16	3.14	2⅛	3.52	3½	3.60	3⅝	4.57	4 9/16
22316	2½ x 2 x ¾	1.04	1 1/16	1.76	1¾	1.59	1 9/16	2.74	2¾	2.67	2 11/16	3.17	3 3/16
20709	2½ x 2 x 1	1.04	1 1/16	1.77	1¾	1.65	1⅝	2.74	2¾	2.67	2 11/16	3.24	3¼
22283	2½ x 2 x 1½	1.30	1 5/16	1.78	1¾	2.07	2 1/16	2.99	3	3.20	1 3/16	3.66	3 11/16
22278	2½ x 2 x 2	1.50	1½	1.78	1¾	2.25	2¼	3.19	3 3/16	3.36	3⅜	3.83	3 13/16
20714	2½ x 2 x 2½	1.83	1 13/16	1.91	1 15/16	2.41	2 7/16	3.52	3½	3.60	3⅝	4.00	4
22311	2½ x 2½ x ½	0.91	15/16	1.60	1⅝	0.91	15/16	2.60	2⅝	2.35	2⅜	2.60	2⅝
22309	2½ x 2½ x ¾	0.91	15/16	1.66	1 11/16	0.91	15/16	2.60	2⅝	2.56	2 9/16	2.60	2⅝
22293	2½ x 2½ x 1	1.04	1 1/16	1.77	1¾	1.04	1 1/16	2.74	2¾	2.68	2 11/16	2.74	2¾
22288	2½ x 2½ x 1¼	1.16	1 3/16	1.76	1¾	1.16	1 3/16	2.85	2⅞	2.79	2 13/16	2.85	2⅞
20803	2½ x 2½ x 1½	1.30	1 5/16	1.78	¾	1.30	1 5/16	2.99	3	3.21	3 3/16	2.99	3
20688	2½ x 2½ x 2	1.54	1 9/16	1.75	¾	1.54	1 9/16	3.23	3¼	3.34	3 5/16	3.23	3¼
20683	2½ x 2½ x 2½	1.83	1 13/16	1.94	1 15/16	1.83	1 13/16	3.52	3½	3.63	3⅝	3.52	3½
22318	3 x ¾ x 3	2.07	2 1/16	2.15	2⅛	3.82	3 13/16	4.04	4 1/16	4.11	4⅛	4.72	4¾
20724	3 x 1 x 3	2.07	2 1/16	2.15	2⅛	3.96	3 15/16	4.04	4 1/16	4.11	4⅛	4.86	4⅞
20729	3 x 1¼ x 3	2.07	2 1/16	2.15	2⅛	3.83	3 13/16	4.04	4 1/16	4.11	4⅛	4.86	4⅞
20727	3 x 1½ x 3	2.07	2 1/16	2.15	2⅛	3.71	3 11/16	4.04	4 1/16	4.11	4⅛	5.14	5⅛
20732	3 x 2 x 2	1.56	1 9/16	2.03	2 1/16	2.33	2 5/16	3.52	3½	3.61	3⅝	3.92	3 15/16
20734	3 x 2 x 2½	1.85	1⅞	2.15	2⅛	2.63	2⅝	3.82	3 13/16	3.85	3⅞	4.21	4 3/16
20739	3 x 2 x 3	2.07	2 1/16	2.15	2⅛	2.84	2 13/16	4.04	4 1/16	4.11	4⅛	4.43	4 7/16
20744	3 x 2½ x 2	1.56	1 9/16	2.03	2 1/16	2.07	2 1/16	3.52	3½	3.61	3⅝	3.76	3¾
20749	3 x 2½ x 2½	1.85	1⅞	2.15	2⅛	2.56	2 9/16	3.82	3 13/16	3.85	3⅞	4.25	4¼
20754	3 x 2½ x 3	2.07	2 1/16	2.15	2⅛	2.78	2¾	4.04	4 1/16	4.11	4⅛	4.47	4½
22315	3 x 3 x ½	0.93	15/16	1.85	1⅞	0.93	15/16	2.89	2⅞	2.60	2⅝	2.89	2⅞
22310	3 x 3 x ¾	0.93	15/16	1.91	1 15/16	0.93	15/16	2.89	2⅞	2.81	2 13/16	2.89	2⅞
22308	3 x 3 x 1	1.06	2 1/16	2.02	2	1.06	1 1/16	3.03	3 1/16	2.92	2 15/16	3.03	3 1/16
22313	3 x 3 x 1¼	1.18	1 3/16	2.01	2	1.18	1 3/16	3.15	3⅛	3.04	3 1/16	3.15	3⅛
20798	3 x 3 x 1½	1.32	1 5/16	2.03	2 1/16	1.32	1 5/16	3.29	3 5/16	3.45	3 7/16	3.29	3 5/16

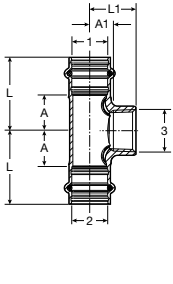
Continued on next page

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



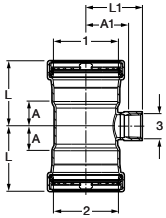
Continued from previous page														
Part	Size (in)			A (in)		A1 (in)		A2 (in)		L (in)		L1 (in)		L2 (in)	
No.	1	2	3	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac
20698	3	x 3 x	2	1.56	1 9/16	2.00	2	1.56	1 9/16	3.52	3 1/2	3.59	3 9/16	3.52	2 1/2
20703	3	x 3 x	2 1/2	1.85	1 7/8	2.15	2 1/8	1.85	1 7/8	3.82	3 13/16	3.85	3 7/8	3.82	3 13/16
20693	3	x 3 x	3	2.07	2 1/16	2.21	2 3/16	2.07	2 1/16	4.04	4 1/16	4.18	4 3/16	4.04	4 1/16
20774	4	x 3 x	2	1.59	1 9/16	2.57	2 9/16	3.33	3 5/16	3.96	3 15/16	4.15	4 1/8	5.22	5 1/4
20784	4	x 3 x	3	2.11	2 1/8	2.66	2 11/16	3.84	3 13/16	4.47	4 1/2	4.63	4 5/8	5.81	5 13/16
22314	4	x 4 x	½	1.08	1 1/16	2.35	2 3/8	1.08	1 1/16	3.45	3 7/16	3.10	3 1/8	3.45	3 7/16
22312	4	x 4 x	¾	1.08	1 1/16	2.41	2 7/16	1.08	1 1/16	3.45	3 7/16	3.31	3 5/16	3.45	3 7/16
20794	4	x 4 x	1	1.36	1 3/8	2.52	2 1/2	1.36	1 3/8	3.72	3 3/4	3.42	3 7/16	3.72	3 3/4
20795	4	x 4 x	1 1/4	1.36	1 3/8	2.50	2 1/2	1.36	1 3/8	3.72	3 3/4	3.54	3 9/16	3.72	3 3/4
20808	4	x 4 x	1 1/2	1.36	1 3/8	2.52	2 1/2	1.36	1 3/8	3.72	3 3/4	3.95	3 15/16	3.72	3 3/4
20713	4	x 4 x	2	1.59	1 9/16	2.53	2 1/2	1.59	1 9/16	3.96	3 15/16	4.11	4 1/8	3.96	3 15/16
20718	4	x 4 x	2 1/2	1.89	1 7/8	2.65	2 11/16	1.89	1 7/8	4.25	4 1/4	4.35	4 3/8	4.25	4 1/4
20723	4	x 4 x	3	2.11	2 1/8	2.69	2 11/16	2.11	2 1/8	4.47	4 1/2	4.65	4 5/8	4.47	4 1/2
20708	4	x 4 x	4	2.60	2 5/8	2.72	2 3/4	2.60	2 5/8	4.96	4 15/16	5.09	5 1/16	4.96	4 15/16

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



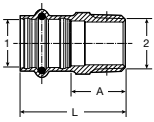
Part	Size (in)			A (in)		A1 (in)		L (in)		L1 (in)	
No.	1	2	3	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac
79580	½ x ½ x ½ FPT			0.79	13/16	0.69	11/16	1.61	1 5/8	1.30	1 5/16
79585	¾ x ¾ x ¼ FPT			0.67	11/16	0.79	13/16	1.57	1 9/16	1.18	1 3/16
79590	¾ x ¾ x ½ FPT			0.79	13/16	0.88	7/8	1.69	1 11/16	1.42	1 7/16
79595	¾ x ¾ x ¾ FPT			0.91	15/16	0.59	9/16	1.81	1 13/16	1.14	1 1/8
79760	1 x 1 x ½ FPT			0.79	13/16	1.04	1 1/16	1.69	1 11/16	1.57	1 9/16
79765	1 x 1 x ¾ FPT			0.91	15/16	1.06	1 1/16	1.81	1 13/16	1.61	1 5/8
79770	1 1/4 x 1 1/4 x ½ FPT			0.83	13/16	1.16	1 3/16	1.85	1 7/8	1.69	1 11/16
79775	1 1/4 x 1 1/4 x ¾ FPT			0.95	15/16	1.18	1 3/16	1.97	2	1.73	1 3/4
79780	1 1/2 x 1 1/2 x ½ FPT			0.87	7/8	1.24	1 1/4	2.28	2 1/4	1.77	1 13/16
79785	1 1/2 x 1 1/2 x ¾ FPT			0.94	15/16	1.30	1 5/16	2.36	2 3/8	1.85	1 7/8
79790	2 x 2 x ½ FPT			0.98	1	1.59	1 9/16	2.56	2 9/16	2.13	2 1/8
79795	2 x 2 x ¾ FPT			1.06	1 1/16	1.65	1 11/16	2.64	2 5/8	2.20	2 3/16

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



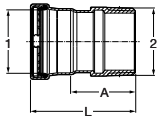
Part No.	Size (in) 1 2 3	A (in)	A1 (in)	L (in)	L1 (in)
20883	2½ x 2½ x ¾ FPT	1.02	1.78	2.72	2.34
20878	2½ x 2½ x 2 FPT	1.54	1.90	3.23	2.60
20893	3 x 3 x ¾ FPT	1.04	2.03	3.01	2.59
20888	3 x 3 x 2 FPT	1.56	2.16	3.52	2.85
20873	4 x 4 x ¾ FPT	1.08	2.53	3.34	3.09
20868	4 x 4 x 2 FPT	1.59	2.69	3.96	3.38

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



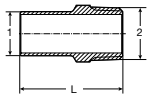
Part No.	Size (in) 1 2	A (in) Dec	A (in) Frac	L (in) Dec	L (in) Frac
79210	½ x ⅜ MPT	0.77	¾	1.59	1 9/16
79215	½ x ½ MPT	0.89	⅞	1.71	1 11/16
79220	½ x ¾ MPT	1.00	1	1.83	1 13/16
79225	¾ x ½ MPT	1.02	1	1.93	1 15/16
79230	¾ x ¾ MPT	1.02	1	1.93	1 15/16
79235	¾ x 1 MPT	1.18	1 3/16	2.09	2 1/16
79240	1 x ¾ MPT	1.18	1 3/16	2.09	2 1/16
79245	1 x 1 MPT	1.26	1¼	2.17	2 3/16
79250	1 x 1¼ MPT	1.54	1 9/16	2.44	2 7/16
79255	1¼ x 1 MPT	1.22	1¼	2.24	2¼
79260	1¼ x 1¼ MPT	1.34	1 5/16	2.36	2⅜
79265	1¼ x 1½ MPT	1.48	1½	2.50	2½
79270	1½ x 1¼ MPT	1.34	1 5/16	2.76	2¾
79275	1½ x 1½ MPT	1.28	1¼	2.70	2 11/16
79280	1½ x 2 MPT	1.65	1⅝	3.07	3 1/16
79285	2 x 1½ MPT	1.54	1 9/16	3.11	3⅛
79290	2 x 2 MPT	1.50	1½	3.07	3 1/16

Viega ProPress Adapter P x MPT – Model 0911XL



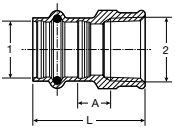
Part No.	Size (in) 1 2	A (in) Dec	A (in) Frac	L (in) Dec	L (in) Frac
20823	2½ x 2½ MPT	2.76	2¾	4.45	4 7/16
20828	3 x 3 MPT	2.84	2 13/16	4.80	4 13/16
20838	4 x 4 MPT	3.10	3⅛	5.46	5 7/16

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



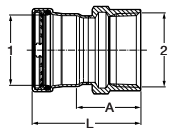
Part No.	Size (in) 1 2	L (in) Dec	Frac
79375	½ x ⅜ MPT	1.75	1¾
79380	½ x ½ MPT	1.95	1 15/16
79385	½ x ¾ MPT	2.05	2 1/16
79390	¾ x ½ MPT	1.93	1 15/16
79395	¾ x ¾ MPT	2.05	2 1/16
79400	1 x ¾ MPT	2.05	2 1/16
79405	1 x 1 MPT	2.22	2¼
79410	1¼ x 1¼ MPT	2.54	2 9/16
79415	1½ x 1½ MPT	2.89	2⅞
79420	2 x 2 MPT	3.33	3 5/16

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



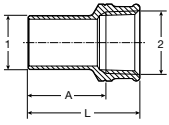
Part No.	Size (in) 1 2	A (in) Dec	Frac	L (in) Dec	Frac
79295	½ x ⅜ FPT	0.19	3/16	1.42	1 7/16
79300	½ x ½ FPT	0.25	¼	1.61	1⅝
79305	½ x ¾ FPT	0.27	¼	1.65	1⅝
79310	¾ x ½ FPT	0.33	5/16	1.77	1¾
79315	¾ x ¾ FPT	0.35	⅜	1.81	1 13/16
79320	1 x ½ FPT	0.41	7/16	1.85	1⅞
79325	1 x ¾ FPT	0.39	⅜	1.85	1⅞
79330	1 x 1 FPT	0.44	7/16	2.01	2
79335	1 x 1¼ FPT	0.50	½	2.09	2 1/16
79340	1¼ x ½ FPT	0.37	⅜	1.93	1 15/16
79345	1¼ x 1 FPT	0.24	¼	1.93	1 15/16
79350	1¼ x 1¼ FPT	0.34	5/16	2.05	2 1/16
79355	1¼ x 1½ FPT	0.42	7/16	2.13	2⅛
79360	1½ x 1¼ FPT	0.26	¼	2.36	2⅜
79365	1½ x 1½ FPT	0.34	5/16	2.44	2 7/16
79370	2 x 2 FPT	0.41	7/16	2.68	2 11/16

Viega ProPress Adapter P x FPT – Model 0912XL



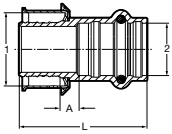
Part No.	Size (in) 1 2	A (in) Dec	Frac	L (in) Dec	Frac
20819	2½ x 2½ FPT	1.53	1½	4.15	4⅛
20829	3 x 3 FPT	1.84	1 13/16	4.82	4 13/16
20839	4 x 4 FPT	2.09	2 1/16	5.55	5 9/16

Viega ProPress Adapter Zero Lead Bronze FTG x FPT – Model 2912.1ZL



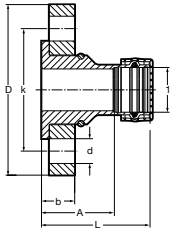
Part No.	Size (in) 1	2	A (in) Dec	Frac	L (in) Dec	Frac
79425	½ x	⅜ FPT	1.10	1⅛	1.54	1⁹⁄₁₆
79430	½ x	½ FPT	1.22	1¼	1.75	1¾
79435	½ x	¾ FPT	1.30	1⁵⁄₁₆	1.83	1¹³⁄₁₆
79440	¾ x	½ FPT	1.26	1¼	1.79	1¹³⁄₁₆
79445	¾ x	¾ FPT	1.28	1¼	1.83	1¹³⁄₁₆
79455	1 x	½ FPT	1.35	1⅜	1.99	2
79450	1 x	1 FPT	1.33	1⁵⁄₁₆	1.99	2
79460	1¼ x	½ FPT	1.65	1⅝	2.19	2³⁄₁₆
79465	1¼ x	1¼ FPT	1.50	1½	2.19	2³⁄₁₆
79470	1½ x	1½ FPT	1.88	1⅞	2.56	2⁹⁄₁₆
79475	2 x	2 FPT	2.13	2⅛	2.95	2¹⁵⁄₁₆

Viega PEX Press Adapter Zero Lead Bronze P x P – Model 2813PZL



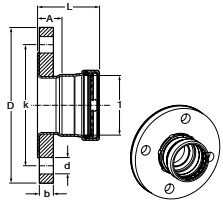
Part No.	Size (in) 1	2	A (in) Dec	Frac	L (in) Dec	Frac
99620	½ x	½	0.29	⁵⁄₁₆	1.61	1⅝
99626	½ x	¾	0.43	⁷⁄₁₆	1.83	1¹³⁄₁₆
99630	¾ x	½	0.23	¼	1.56	1⁹⁄₁₆
99640	¾ x	¾	0.33	⁵⁄₁₆	1.73	1¾
99645	1 x	¾	0.35	⅜	1.87	1⅞
99660	1 x	1	0.45	⁷⁄₁₆	1.97	2
99665	1¼ x	1	0.49	½	2.26	2¼
99670	1¼ x	1¼	0.49	½	2.38	2⅜
66675	1½ x	1	0.59	⁹⁄₁₆	2.36	2⅜
99680	1½ x	1½	0.59	⁹⁄₁₆	2.87	2⅞
99685	2 x	1	0.73	¾	2.68	2¹¹⁄₁₆
99690	2 x	2	0.59	⁹⁄₁₆	3.21	3³⁄₁₆

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



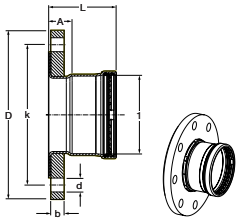
Part No.	Size (in) 1	A (in) Dec	A (in) Frac	L (in) Dec	L (in) Frac	b (in) Dec	b (in) Frac	D (in) Dec	D (in) Frac	k (in) Dec	k (in) Frac	d (in) Dec	d (in) Frac
79680	1	1.85	1 7/8	2.76	2 3/4	0.84	13/16	4.33	4 5/16	3.11	3 1/8	0.63	5/8
79685	1 1/4	1.73	1 3/4	2.76	2 3/4	0.84	13/16	4.53	4 1/2	3.50	3 1/2	0.63	5/8
79690	1 1/2	1.65	1 5/8	3.07	3 1/16	0.84	13/16	4.92	4 15/16	3.86	3 7/8	0.63	5/8
79695	2	2.09	2 1/16	3.66	3 11/16	0.84	13/16	5.91	5 15/16	4.76	4 3/4	0.75	3/4

Viega ProPress Adapter Flange P x Flange – Model 0959.5XL



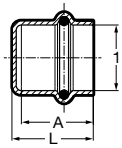
Part No.	Size (in) 1	A (in) Dec	A (in) Frac	L (in) Dec	L (in) Frac	b (in) Dec	b (in) Frac	k (in) Dec	k (in) Frac	D (in) Dec	D (in) Frac	d (in) Dec	d (in) Frac
20853	2 1/2	1.09	1/16	2.79	2 13/16	0.70	11/16	5.51	5 1/2	7.09	7 1/16	0.75	3/4
20858	3	1.20	3/16	3.17	3 3/16	0.79	13/16	5.98	6	7.48	7 1/2	0.75	3/4

Viega ProPress Adapter Flange P x Flange – Model 0959.5XL



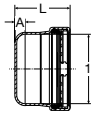
Part No.	Size (in)	A (in)		L (in)		b (in)		k (in)		D (in)		d (in)	
	1	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac
20863	4	1.29	1 5/16	3.66	3 11/16	0.86	7/8	7.52	7 1/2	9.06	9 1/16	0.75	3/4

Viega ProPress Cap Copper P – Model 2956



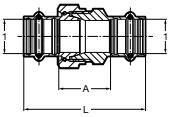
Part No.	Size (in)	A (in)		L (in)	
	1	Dec	Frac	Dec	Frac
77712	1/2	0.79	13/16	0.92	15/16
77717	3/4	0.94	15/16	1.07	1 1/16
77722	1	0.99	1	1.11	1 1/8
77727	1 1/4	1.20	1 3/16	1.32	1 5/16
77732	1 1/2	1.49	1 1/2	1.62	1 5/8
77737	2	1.69	1 11/16	1.81	1 13/16

Viega ProPress Cap P – Model 0956XL



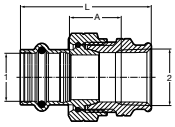
Part No.	Size (in)	A (in)		L (in)	
	1	Dec	Frac	Dec	Frac
20833	2 1/2	0.39	3/8	2.11	2 1/8
20843	3	0.39	3/8	2.36	2 3/8
20848	4	0.39	3/8	2.76	2 3/4

Viega ProPress Union Zero Lead Bronze P x P – Model 2960ZL



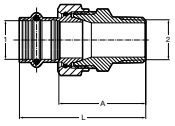
Part No.	Size (in)	A (in)		L (in)	
	1	Dec	Frac	Dec	Frac
79125	1/2	1.19	1 3/16	2.84	2 13/16
79130	3/4	1.34	1 5/16	3.15	3 1/8
79135	1	1.83	1 13/16	3.65	3 5/8
79140	1 1/4	1.64	1 5/8	3.69	3 11/16
79145	1 1/2	2.13	2 1/8	4.96	4 15/16
79150	2	2.07	2 1/16	5.22	5 1/4

Viega ProPress Union Zero Lead Bronze P x FPT – Model 2962ZL



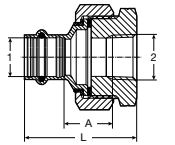
Part No.	Size (in) 1	2	A (in) Dec	Frac	L (in) Dec	Frac
79700	½ x ½ FPT		0.91	15/16	2.27	2¼
79705	¾ x ¾ FPT		0.96	15/16	2.42	2 7/16
79710	1 x 1 FPT		1.31	1 5/16	2.88	2⅞
79715	1¼ x 1¼ FPT		1.27	1¼	2.97	3
79720	1½ x 1½ FPT		1.77	1¾	3.87	3⅞
79725	2 x 2 FPT		1.65	1⅝	3.92	3 15/16

Viega ProPress Union Zero Lead Bronze P x MPT – Model 2965ZL



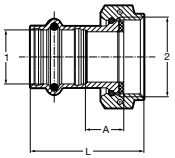
Part No.	Size (in) 1	2	A (in) Dec	Frac	L (in) Dec	Frac
79730	½ x ½ MPT		1.86	1⅞	2.69	2 11/16
79735	¾ x ¾ MPT		2.00	2	2.90	2⅞
79740	1 x 1 MPT		2.54	2 9/16	3.45	3 7/16
79745	1¼ x 1¼ MPT		2.49	2½	3.52	3½
79750	1½ x 1½ MPT		3.05	3 1/16	4.47	4½
79755	2 x 2 MPT		2.99	3	4.57	4 9/16

Viega ProPress Dielectric Union Zero Lead Bronze P x FPT – Model 2967ZL



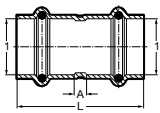
Part No.	Size (in) 1	2	A (in) Dec	Frac	L (in) Dec	Frac
79155	½ x ½ FPT		0.88	⅞	2.24	1¼
79160	¾ x ¾ FPT		1.11	1⅛	2.57	2 9/16
79165	1 x 1 FPT		1.00	1	2.57	2 9/16
79170	1¼ x 1¼ FPT		0.97	1	2.68	2 11/16
79175	1½ x 1½ FPT		1.01	1	3.11	3⅛
79180	2 x 2 FPT		1.26	1¼	3.53	3½

Viega ProPress Tailpiece Zero Lead Bronze P x F BSP – Model 2957ZL



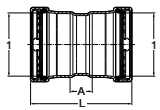
Part No.	Size (in) 1	2	A (in) Dec	Frac	L (in) Dec	Frac
79155	½ x ½ FPT		0.88	⅞	2.24	1¼
79160	¾ x ¾ FPT		1.11	1⅛	2.57	2 9/16
79165	1 x 1 FPT		1.00	1	2.57	2 9/16
79170	1¼ x 1¼ FPT		0.97	1	2.68	2 11/16
79175	1½ x 1½ FPT		1.01	1	3.11	3⅛
79180	2 x 2 FPT		1.26	1¼	3.53	3½

Viega ProPress Coupling with Stop Copper P x P – Model 2915



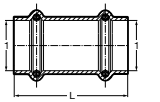
Part No.	Size (in)	A (in)		L (in)	
	1 1	Dec	Frac	Dec	Frac
78047	½ x ½	0.12	⅛	1.61	1⅝
78052	¾ x ¾	0.20	3⁄16	2.01	2
78057	1 x 1	0.16	3⁄16	1.97	2
78062	1¼ x 1¼	0.14	⅛	2.20	2 3⁄16
78067	1½ x 1½	0.14	⅛	2.99	3
78072	2 x 2	0.14	⅛	3.31	2 5⁄16

Viega ProPress Coupling with Stop P x P – Model 0915XL



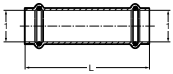
Part No.	Size (in)	A (in)		L (in)	
	1 1	Dec	Frac	Dec	Frac
20728	2½ x 2½	0.95	15⁄16	4.33	4 5⁄16
20733	3 x 3	0.98	1	4.92	4 15⁄16
20738	4 x 4	1.06	1 1⁄16	5.79	5 13⁄16

Viega ProPress Coupling No Stop Copper P x P – Model 2915.3



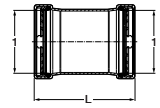
Part No.	Size (in)	L (in)	
	1 1	Dec	Frac
78172	½ x ½	1.61	1⅝
78177	¾ x ¾	2.01	2
78182	1 x 1	1.97	2
78187	1¼ x 1¼	2.20	2 3⁄16
78192	1½ x 1½	2.99	3
78197	2 x 2	3.31	3 5⁄16

Viega ProPress Extended Coupling Copper P x P – Model 2915.5



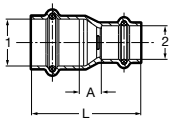
Part No.	Size (in)	L (in)	
	1 1	Dec	Frac
20743	2½ x 2½	4.33	4 5⁄16
20748	3 x 3	4.92	4 15⁄16
20753	4 x 4	5.79	5 13⁄16

Viega ProPress Coupling No Stop P x P – Model 0915.5XL



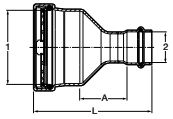
Part No.	Size (in)	L (in)	
	1 1	Dec	Frac
20743	2½ x 2½	4.33	4 5⁄16
20748	3 x 3	4.92	4 15⁄16
20753	4 x 4	5.79	5 13⁄16

Viega ProPress Reducer Copper P x P – Model 2915.2



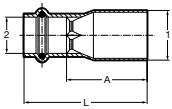
Part No.	Size (in) 1	2	A (in) Dec	A (in) Frac	L (in) Dec	L (in) Frac
78147	¾	½	0.42	7/16	2.07	2 1/16
15603	1	½	0.71	1 1/16	2.36	2 3/8
78152	1	¾	0.48	½	2.29	2 5/16
15593	1¼	¾	0.70	1 1/16	2.64	2 5/8
78157	1¼	1	0.55	9/16	2.48	2½
18473	1½	¾	0.98	1	3.33	3 5/16
15588	1½	1	0.74	¾	3.07	3 1/16
78162	1½	1¼	0.50	½	2.96	2 15/16
18468	2	¾	1.54	1 9/16	4.02	4
15608	2	1	1.29	1 5/16	3.78	3¾
22328	2	1¼	0.81	13/16	3.43	3 7/16
78167	2	1½	0.74	¾	3.75	3¾

Viega ProPress Reducer P x P – Model 0915.2XL



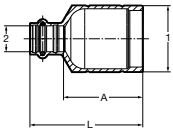
Part No.	Size (in) 1	2	A (in) Dec	A (in) Frac	L (in) Dec	L (in) Frac
20685	2½	1	1.76	1¾	4.36	4 3/8
20690	2½	1¼	1.61	1 5/8	4.34	4 5/16
20695	2½	1½	1.52	1½	4.64	4 5/8
20700	2½	2	1.41	1 7/16	4.69	4 11/16
20705	3	1½	1.78	1¾	5.17	5 3/16
20710	3	2	1.53	1½	5.08	5 1/16
20715	3	2½	1.41	1 7/16	5.07	5 1/16
20720	4	2	2.06	2 1/16	6.00	6
20725	4	2½	1.93	1 15/16	5.99	6
20730	4	3	1.70	1 11/16	6.03	6 1/16

Viega ProPress Reducer Copper FTG x P – Model 2915.1



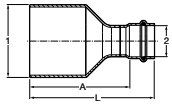
Part No.	Size (in)		A (in)		L (in)	
	1	2	Dec	Frac	Dec	Frac
78077	¾ x	½	1.42	1 7/16	2.17	2 3/16
78082	1 x	½	1.69	1 11/16	2.44	2 7/16
78087	1 x	¾	1.42	1 7/16	2.32	2 5/16
22333	1¼ x	½	1.91	1 15/16	2.74	2¾
78092	1¼ x	¾	1.85	1⅞	2.76	2¾
78097	1¼ x	1	1.57	1 9/16	2.48	2½
14543	1½ x	¾	2.56	2 9/16	3.46	3 7/16
78102	1½ x	1	2.28	2¼	3.19	3 3/16
78107	1½ x	1¼	2.04	2 1/16	3.07	3 1/16
78112	2 x	1	3.03	3 1/16	3.94	3 15/16
78117	2 x	1¼	2.79	2 13/16	3.82	3 13/16
78122	2 x	1½	2.63	2⅝	4.06	4 1/16

Viega ProPress Reducer Zero Lead Bronze FTG x P – Model 2915.1ZL



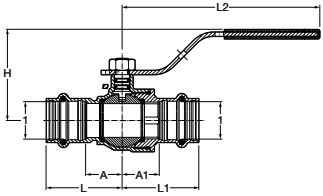
Part No.	Size (in)		A (in)		L (in)	
	1	2	Dec	Frac	Dec	Frac
79850	1½ x	½	1.95	1 15/16	2.78	2¾
79855	2 x	½	2.38	2⅜	3.21	3 3/16
79860	2 x	¾	2.42	2 7/16	3.33	3 5/16

Viega ProPress Reducer FTG x P – Model 0915.1XL



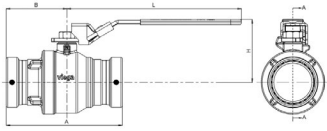
Part No.	Size (in)		A (in)		L (in)	
	1	2	Dec	Frac	Dec	Frac
20814	2½ x	1	3.61	3⅝	4.52	4½
20815	2½ x	1¼	3.47	3½	4.51	4½
20813	2½ x	1½	3.41	3 7/16	4.84	4 13/16
20758	2½ x	2	2.35	2⅜	3.94	3 15/16
20817	3 x	1¼	3.96	3 15/16	5.00	5
20818	3 x	1½	3.91	3 15/16	5.34	5 5/16
20763	3 x	2	2.98	3	4.57	4 9/16
20768	3 x	2½	2.76	2¾	4.45	4 7/16
20773	4 x	2	4.58	4 9/16	6.17	6 3/16
20778	4 x	2½	4.45	4 7/16	6.15	6⅛
20783	4 x	3	4.17	4 3/16	6.14	6⅛

Viega ProPress Ball Valve Zero Lead Bronze P x P – Model 2971.1ZL



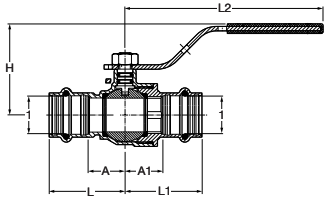
Part No.	Size (in)		A (in)		A1 (in)		L (in)		L1 (in)		L2 (in)		H (in)	
	1	1	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac
79920	½ x ½		0.75	¾	0.75	¾	1.57	1 9/16	1.57	1 9/16	4.57	4 9/16	1.97	2
79925	¾ x ¾		0.85	⅞	0.87	⅞	1.75	1¾	1.77	1¾	4.57	4 9/16	2.09	2 1/16
79930	1 x 1		1.02	1	1.06	1 1/16	1.93	1 15/16	1.96	1 15/16	5.75	5¾	2.46	2 7/16
79935	1¼ x 1¼		1.14	1⅛	1.12	1⅛	2.17	2 3/16	2.15	2⅛	5.75	5¾	2.67	2 11/16
79940	1½ x 1½		1.46	1 7/16	1.25	1¼	2.87	2⅞	2.67	2 11/16	6.12	6⅛	3.02	3
79950	2 x 2		1.73	1¾	1.47	1½	3.31	3 5/16	3.05	3 1/16	6.12	6⅛	3.32	3 5/16

Viega ProPress Ball Valve Zero Lead Brass P x P – Model 2971.1XL



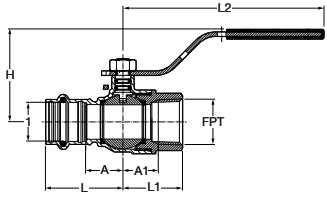
Part No.	Size (in)	A (in)		B (in)		H (in)		L (in)		Weight (lbs)
		Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	
78300	2½	7.47	7½	3.91	3 15/16	4.02	4	11.22	11¼	7.0
78305	3	8.15	8⅛	4.17	4 3/16	4.37	4⅜	11.22	11¼	9.7
78310	4	9.72	9¾	4.99	5	5.12	5⅛	11.22	11¼	17.5

Viega ProPress Ball Valve Zero Lead Bronze P x P – Model 2971.3ZL



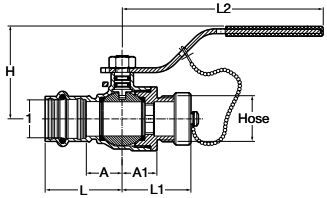
Part No.	Size (in) 1	1	A (in) Dec	Frac	A1 (in) Dec	Frac	L (in) Dec	Frac	L1 (in) Dec	Frac	L2 (in) Dec	Frac	H (in) Dec	Frac
79923	½ x ½		0.75	¾	0.75	¾	1.57	1 9/16	1.57	1 9/16	4.57	4 9/16	1.97	2
79928	¾ x ¾		0.85	⅞	0.87	⅞	1.75	1¾	1.77	1¾	4.57	4 9/16	2.09	2 1/16
79933	1 x 1		1.02	1	1.06	1 1/16	1.93	1 15/16	1.96	1 15/16	5.75	5¾	2.46	2 7/16
79938	1¼ x 1¼		1.14	1⅛	1.12	1⅛	2.17	2 3/16	2.15	2⅛	5.75	5¾	2.67	2 11/16
79943	1½ x 1½		1.46	1 7/16	1.25	1¼	2.87	2⅞	2.67	2 11/16	6.12	6⅛	3.02	3
79948	2 x 2		1.73	1¾	1.47	1½	3.31	3 5/16	3.05	3 1/16	6.12	6⅛	3.32	3 5/16

Viega ProPress Ball Valve Zero Lead Bronze P x FPT – Model 2971.4ZL



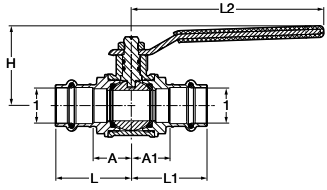
Part No.	Size (in) 1	FPT	A (in) Dec	Frac	A1 (in) Dec	Frac	L (in) Dec	Frac	L1 (in) Dec	Frac	L2 (in) Dec	Frac	H (in) Dec	Frac
79970	½ x ½		0.73	¾	0.66	11/16	1.57	1 9/16	1.20	1 3/16	4.57	4 9/16	1.97	2
79975	¾ x ¾		0.85	⅞	0.79	13/16	1.75	1¾	1.35	1⅜	4.57	4 9/16	2.09	2 1/16
79980	1 x 1		1.02	1	0.98	1	1.93	1 15/16	1.63	1⅝	5.75	5¾	2.46	2 7/16

Viega ProPress Ball Valve Zero Lead Bronze P x Hose – Model 2971.6ZL



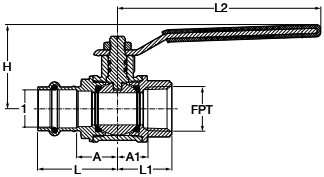
Part No.	Size (in)		A (in)		A1 (in)		L (in)		L1 (in)		L2 (in)		H (in)	
	1	Hose	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac
79875	½ x ¾	GH	0.75	¾	0.79	13⁄16	1.57	1 9⁄16	1.56	1 9⁄16	4.57	4 9⁄16	1.99	2
79876	¾ x ¾	GH	0.85	⅞	0.79	13⁄16	1.75	1¾	1.56	1 9⁄16	4.57	4 9⁄16	2.10	2⅛

Viega ProPress Ball Valve Bronze/Brass P x P – Model 2973



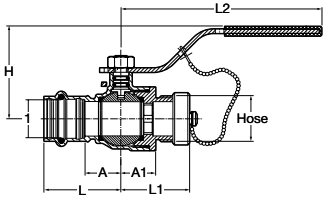
Part No.	Size (in)		A (in)		A1 (in)		L (in)		L1 (in)		L2 (in)		H (in)	
	1	1	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac
24000	½ x ½		0.83	13⁄16	0.83	13⁄16	1.58	1 9⁄16	1.58	1 9⁄16	3.94	3 15⁄16	1.69	1 11⁄16
24005	¾ x ¾		0.95	15⁄16	0.95	15⁄16	1.86	1⅞	1.86	1⅞	4.72	4¾	1.97	2
24010	1 x 1		1.18	1 3⁄16	1.18	1 3⁄16	2.09	2 1⁄16	2.09	2 1⁄16	4.72	4¾	2.13	2⅛
24015	1¼ x 1¼		1.29	1 5⁄16	1.29	1 5⁄16	2.31	2 5⁄16	2.31	2 5⁄16	6.22	6¼	2.87	2⅞
24020	1½ x 1½		1.39	1⅜	1.39	1⅜	2.81	1 13⁄16	2.81	2 13⁄16	6.22	6¼	3.11	3⅛
24025	2 x 2		1.85	1⅞	1.85	1⅞	3.43	3 7⁄16	3.43	3 7⁄16	6.22	6¼	3.46	3 7⁄16

Viega ProPress Ball Valve Bronze/Brass P x FPT – Model 2973.1



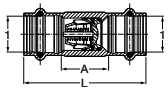
Part No.	Size (in) 1	FPT	A (in) Dec	Frac	A1 (in) Dec	Frac	L (in) Dec	Frac	L1 (in) Dec	Frac	L2 (in) Dec	Frac	H (in) Dec	Frac
24030	½ x ½		0.83	13/16	0.63	5/8	1.58	1 9/16	1.16	1 3/16	3.94	3 15/16	1.69	1 11/16
24035	¾ x ¾		0.95	15/16	0.70	11/16	1.86	1 7/8	1.26	1 1/4	4.72	4 3/4	1.97	2
24040	1 x 1		1.18	1 3/16	0.93	15/16	2.09	2 1/16	1.59	1 9/16	4.72	4 3/4	2.13	2 1/8

Viega ProPress Ball Valve Bronze/Brass P x Hose – Model 2973.3



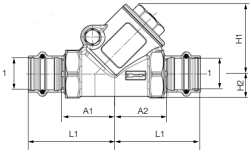
Part No.	Size (in) 1	Hose	A (in) Dec	Frac	A1 (in) Dec	Frac	L (in) Dec	Frac	L1 (in) Dec	Frac	L2 (in) Dec	Frac	H (in) Dec	Frac
24090	½ x ¾		0.83	13/16	0.85	7/8	1.58	1 9/16	1.30	1 5/16	3.89	3 7/8	1.67	1 11/16
24095	¾ x ¾		0.95	15/16	0.94	15/16	1.86	1 7/8	1.39	1 3/8	4.72	4 3/4	1.97	2

Viega ProPress Check Valve Zero Lead Bronze P x P – Model 2974ZL



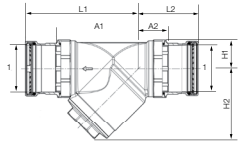
Part No.	Size (in) 1	1	A (in) Dec	Frac	L (in) Dec	Frac
79035	½ x ½		0.87	7/8	2.52	2 1/2
79040	¾ x ¾		1.14	1 1/8	2.95	2 15/16
79045	1 x 1		1.34	1 5/16	3.15	3 1/8
79050	1 1/4 x 1 1/4		1.69	1 11/16	3.74	3 3/4
79055	1 1/2 x 1 1/2		2.09	2 1/16	4.92	4 15/16
79060	2 x 2		2.56	2 9/16	5.71	5 11/16

Viega ProPress Swing Check Valve Zero Lead – Model 2974.2ZL



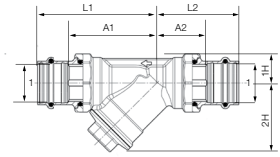
Part No.	Size (in) 1	H1 (in) Dec	H1 (in) Frac	H2 (in) Dec	H2 (in) Frac	L1 (in) Dec	L1 (in) Frac	A1 (in) Dec	A1 (in) Frac	A2 (in) Dec	A2 (in) Frac	Cv (US gal/min
87170	½	1.65	1⅝	0.55	9⁄16	2.05	2 1⁄16	0.47	2½	1.22	1¼	5.6
87175	¾	1.97	2	0.67	11⁄16	2.40	2⅜	0.55	2 9⁄16	1.50	1½	9.6
87180	1	2.24	2¼	0.83	13⁄16	2.72	2 11⁄16	0.75	¾	1.81	1 13⁄16	17
87185	1¼	2.72	2 11⁄16	0.98	1	3.03	3	0.91	15⁄16	2.01	2	28.2
87190	1½	3.15	3⅛	1.14	1⅛	3.62	3⅝	1.02	1	2.20	2 3⁄16	44
87195	2	3.86	3⅞	1.38	1⅜	4.21	4 3⁄16	1.30	1 5⁄16	2.64	2⅝	82.3

Viega ProPress Strainer Valve – Models 2981.1XL



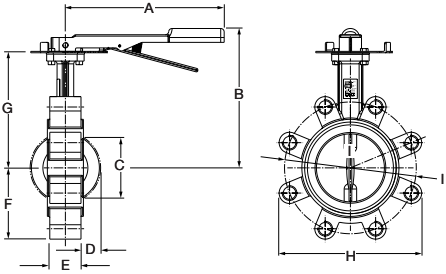
Part No.	Size (in) 1	H1 (in) Dec	H1 (in) Frac	H2 (in) Dec	H2 (in) Frac	L1 (in) Dec	L1 (in) Frac	L2 (in) Dec	L2 (in) Frac	A1 (in) Dec	A1 (in) Frac	A2 (in) Dec	A2 (in) Frac	Cv (US gal/min)
87260	2½	4.09	4 1⁄16	1.69	1 11⁄16	6.89	6⅞	3.82	3 13⁄16	5.00	5	1.93	1 15⁄16	88.9
87265	3	4.80	4 13⁄16	1.97	2	7.68	7 11⁄16	4.09	4 1⁄16	5.63	5⅝	2.05	2 1⁄16	126
87270	4	6.06	6 1⁄16	2.48	2½	9.13	9⅛	4.53	4½	6.89	6⅞	2.29	2 5⁄16	212.7

Viega ProPress Strainer Valve – Models 2981.1ZL



Part No.	Size (in) 1	H1 (in) Dec	H1 (in) Frac	H2 (in) Dec	H2 (in) Frac	L1 (in) Dec	L1 (in) Frac	L2 (in) Dec	L2 (in) Frac	A1 (in) Dec	A1 (in) Frac	A2 (in) Dec	A2 (in) Frac	Cv (US gal/min)
87140	½	0.59	9/16	1.58	1 9/16	2.76	2¾	1.73	1¾	1.93	1 15/16	0.91	1 15/16	3.1
87145	¾	0.71	11/16	1.73	1¾	3.07	3 1/16	2.24	2¼	2.17	2 3/16	1.34	1 5/16	5.1
87150	1	0.87	⅞	2.01	2	3.50	3½	2.40	2⅜	2.60	2⅝	1.50	1½	7.9
87155	1¼	1.02	1	2.48	2½	4.06	4 1/16	2.36	2⅜	3.03	3	1.34	1 5/16	20.5
87160	1½	1.18	1 3/16	2.84	2 13/16	4.84	4 13/16	2.76	2¾	3.43	3 7/16	1.34	1 5/16	29.2
87165	2	1.42	1 7/16	3.11	3 1/8	5.51	5½	3.15	3⅛	3.94	3 15/16	1.58	1 9/16	40

Butterfly Valve – Model 2873.81

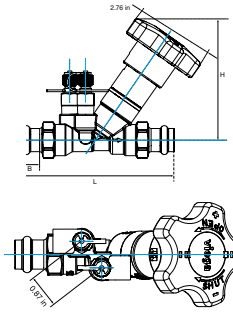


Part No.	Size (in)	A (in) Dec	A (in) Frac	B (in) Dec	B (in) Frac	C (in) Dec	C (in) Frac	D (in) Dec	D (in) Frac	E (in) Dec	E (in) Frac
22076	4	9.06	9 1/16	8.47	8½	3.54	3 9/16	0.91	15/16	2.05	2 1/16

Continued below

Part No.	Size (in)	F (in) Dec	F (in) Frac	G (in) Dec	G (in) Frac	H (in) Dec	H (in) Frac	I (in) Dec	I (in) Frac
22076	4	3.62	3⅝	6.42	6 7/16	8.27	8¼	7.48	7½

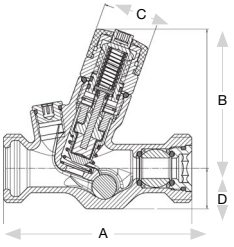
Viega ProPress Manual Balancing Valve – Model 2980ZL



Part No.	Size (in)	ΦP[1] (in)	H (in) Dec	H (in) Frac	L (in) Dec	L (in) Frac	B (in) Dec	B (in) Frac	Weight (lbs)	Flow Range (GPM)
82100	U-½	0.627-0.631	4.06	4 1/16	5.16	5 3/16	0.83	13/16	1.23/1.16	0.27-0.71
82105	L-½	0.627-0.631	4.06	4 1/16	5.16	5 3/16	0.83	13/16	1.23/1.16	0.49-1.17
82110	½	0.627-0.631	4.06	4 1/16	5.16	5 3/16	0.83	13/16	1.23/1.16	0.98-2.35
82115	¾	0.877-0.881	4.06	4 1/16	5.85	5 7/8	0.91	15/16	1.43/1.34	2.19-5.15
82120	1	1.128-1.131	4.06	4 1/16	6.18	6 3/16	0.91	15/16	1.73/1.55	4.09-9.56
82125	1¼	1.378-1.381	4.85	4 7/8	6.99	7	1.02	1	2.78/2.53	8.56-19.81
82130	1½	1.628-1.632	4.94	4 15/16	7.92	7 15/16	1.42	1 7/16	3.50/3.16	12.84-29.80
82135	2	2.128-2.132	5.34	5 5/16	6.14	6 1/8	1.58	1 9/16	4.80/4.46	24.09-55.63

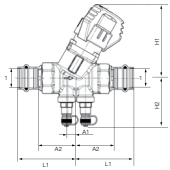
[1] *Tolerance field*

Viega ProPress Automatic Recirculation Regulating Valve Zero Lead – Model 2981.3ZL



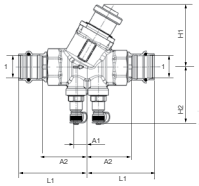
Part No.	Size (in)	A (in) Dec	A (in) Frac	B (in) Dec	B (in) Frac	C (in) Dec	C (in) Frac	D (in) Dec	D (in) Frac
79901	1	3.66	3 11/16	3.43	3 7/16	1.09	1 1/16	0.79	13/16

Viega ProPress Dynamic Auto Balancing Valve – Model 2981.7



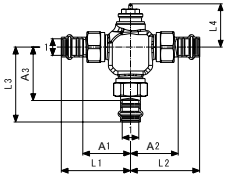
Part No.	Size (in)	H1 (in)		H2 (in)		L1 (in)		A1 (in)		A2 (in)		Flow Range (GPM)	Cv (US gal/ min)
	1	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac		
87305	½	3.47	3½	2.32	2 5/16	2.40	2⅜	0.39	⅜	1.58	1 9/16	0.26 - 4.75	3.02
87310	¾	3.47	3½	2.32	2 5/16	2.68	2 11/16	0.39	⅜	1.77	1¾	0.45 - 8.50	3.02
87315	1	3.58	3 9/16	2.44	2 7/16	2.84	2 13/16	0.39	⅜	1.93	1 15/16	0.60 - 10.57	4.87
87320	1¼	4.37	4⅜	2.76	2¾	3.31	3 5/16	0.55	9/16	2.28	2¼	0.88 - 22.01	12.65
87325	1½	5.20	5 3/16	2.87	2⅞	4.25	4¼	0.83	13/16	2.84	2 13/16	3.17 - 32.58	20.88
87330	2	5.20	5 3/16	3.11	3⅛	4.53	4½	0.83	13/16	2.95	2 15/16	3.96 - 45.57	23.55

Viega ProPress Pressure Independent Balancing and Control Valve – Models 2981.71 / 2987.72



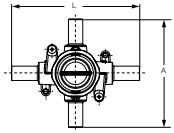
Part No.		Size (in)	H1 (in)		H2 (in)		L1 (in)		A1 (in)		A2 (in)		Flow Range (GPM)	Cv (US gal/ min)
2981.71	2987.72	1	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac		
87365	89925	½	2.44	2 7/16	2.24	2¼	2.40	2⅜	0.39	⅜	1.58	1 9/16	0.26 - 4.75	3.02
87370	89930	¾	2.64	2⅝	2.24	2¼	2.68	2 11/16	0.39	⅜	1.77	1¾	0.45 - 8.50	3.02
87375	89935	1	2.76	2¾	2.32	2 5/16	2.84	2 13/16	0.39	⅜	1.93	1 15/16	0.60 - 10.57	4.87
87380	89940	1¼	3.35	3⅜	2.68	2 11/16	3.31	3 5/16	0.55	9/16	2.28	2¼	0.88 - 22.01	12.65
87385	89945	1½	5.63	5⅝	2.80	2 13/16	4.25	4¼	0.83	13/16	2.84	2 13/16	3.17 - 32.58	20.88
87390	89950	2	5.63	5⅝	3.03	3 1/16	4.53	4½	0.83	13/16	2.95	2 15/16	3.96 - 45.57	23.55

Viega ProPress 3-Way Valve – Model 2976.3



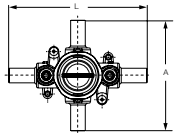
Part No.	Size (in)	A1 (in)		A2 (in)		A3 (in)		L1 (in)		L2 (in)		L3 (in)		L4 (in)		Cv (US gal/ min)
	1	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac	
87420	½	1.85	1⅞	1.85	1⅞	2.56	2⁹⁄₁₆	2.68	2¹¹⁄₁₆	2.68	2¹¹⁄₁₆	2.87	2⅞	1.65	1⅝	2.89
87425	¾	2.28	2¼	2.28	2¼	2.72	2¾	3.19	3³⁄₁₆	3.19	3³⁄₁₆	3.47	3½	2.09	2¹⁄₁₆	5.09
87430	1	2.52	2½	2.52	2½	2.87	2⅞	3.43	3⁵⁄₁₆	3.43	3⁵⁄₁₆	3.62	3⅝	2.09	2¹⁄₁₆	6.59
87435	1¼	2.68	2¹¹⁄₁₆	2.68	2¹¹⁄₁₆	2.99	3	3.70	3¹¹⁄₁₆	3.70	3¹¹⁄₁₆	3.86	3⅞	2.09	2¹⁄₁₆	8.32
87440	1½	3.07	3¹⁄₁₆	3.07	3¹⁄₁₆	3.07	3¹⁄₁₆	4.49	4½	4.49	4½	4.65	4⅝	2.13	2⅛	9.83
87445	2	3.07	3¹⁄₁₆	3.07	3¹⁄₁₆	3.31	3⁵⁄₁₆	4.65	4⅝	4.65	4⅝	4.72	4¾	2.32	2⁵⁄₁₆	11.56

Shower Valve – Model 2842.5



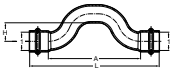
Part No.	Stub Out (in)	A (in)		L (in)	
		Dec	Frac	Dec	Frac
93516	½	4.75	4¾	5.63	5⅝

Shower Valve – Model 2842.6



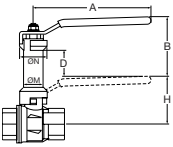
Part No.	Stub Out (in)	A (in)		L (in)	
		Dec	Frac	Dec	Frac
93517	½	4.75	4¾	5.88	5⅞

Viega ProPress Cross-Over Copper P x P – Model 2928



Part No.	Size (in)		A (in)		L (in)		H (in)	
	1	1	Dec	Frac	Dec	Frac	Dec	Frac
77742	½ x ½		3.62	3⅝	5.12	5⅛	0.77	¾
77747	¾ x ¾		4.49	4½	6.30	6⁵⁄₁₆	0.90	⅞

Viega ProPress Stem Extension Brass – Model 2973.96*



Part No.	Valve Size (in)	ØM (in)	ØN (in)	A (in)		H (in)		B (in)		D (in)	
				Dec	Frac	Dec	Frac	Dec	Frac	Dec	Frac
23449	½	0.67	0.98	3.94	3¹⁵⁄₁₆	1.69	1¹¹⁄₁₆	2.22	2¼	1.04	1¹⁄₁₆
23451	¾	0.79	1.10	4.72	4¾	1.97	2	2.46	2⁷⁄₁₆	1.08	1¹⁄₁₆
23451	1	0.79	1.10	4.72	4¾	2.13	2⅛	2.46	2⁷⁄₁₆	1.08	1¹⁄₁₆
23453	1¼	1.02	1.42	6.22	6¼	2.87	2⅞	2.66	2¹¹⁄₁₆	0.81	¹³⁄₁₆
23453	1½	1.02	1.42	6.22	6¼	3.11	3⅛	2.66	2¹¹⁄₁₆	0.81	¹³⁄₁₆
23453	2	1.02	1.42	6.22	6¼	3.46	3⁷⁄₁₆	2.66	2¹¹⁄₁₆	0.81	¹³⁄₁₆

*For use with Models 2973, 2973.1, and 2973.3 valves

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 4, 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, as well as plumbing fittings and fixtures, providing a specified definition and formula for determining "weighted average."

Q What is NSF-61?

A In addition to toxicity testing, 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 and NSF-372) can be used in potable water systems.

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 in Zero Lead and are listed to NSF®-61-372.

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.

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.

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 tables 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 end users, installers, and distribution houses in the United States and Canada that its ProPress fittings, with application appropriate sealing element, and when properly installed in non-industrial and non-marine applications and under specified operating conditions of use, will be free of failure caused by 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 caused by manufacturing defect for a period of five (5) 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 Viega product 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, testing, or maintaining the Viega product in accordance with Viega's installation instructions and other specifications in effect at the time of the installation; applicable code requirements; and accepted industry practice; (3) use of the Viega product under non-recommended system operating conditions; improper handling and protection of the Viega product prior to, during, and after installation; inadequate freeze protection; and exposure to environmental conditions, water pressures, temperatures, or applications outside acceptable operating conditions; (4) acts of nature, such as, but not limited to, earthquakes, fire, flood, lightning, or weather damage, 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 end user to take appropriate measures to mitigate any damage, to include making timely repairs. Only if the warranty applies will Viega be responsible for the remedy under this warranty. The part or parts that you claim failed should be kept and Viega contacted by writing to the address on the back cover 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 that you claim failed due to a manufacturing defect, and document the date of installation and the amount of the repair or replacement if performed by you. 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 a Viega location and reasonable access to the site of damage. 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 Viega product covered by this warranty and that this warranty applies, the EXCLUSIVE AND ONLY REMEDY under this warranty shall be the reimbursement for reasonable charges for repair or replacement of the Viega product itself. VIEGA SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR OTHER DAMAGE (FOR EXAMPLE, ECONOMIC LOSS, 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. 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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