

## Tech Data

# Viega PureFlow® Press Zero Lead Bronze Fittings



### Description

Viega PureFlow Press zero lead bronze fittings with attached stainless steel press sleeves are for use with Viega PureFlow and Viega Barrier SDR-9 cross-linked polyethylene (PEX) tubing. The tool locator ring

to be used as connections for Viega PureFlow PEX and Barrier PEX tubing in  $\frac{5}{16}$ ",  $\frac{3}{8}$ ",  $\frac{1}{2}$ ",  $\frac{5}{8}$ ",  $\frac{3}{4}$ ", 1",  $1\frac{1}{4}$ ",  $1\frac{1}{2}$ ", and 2" sizes as available. The connections are to be completed with the aid of a PureFlow Press hand tool or PureFlow Press power tool.

### Materials

Viega PureFlow Press Zero Lead Bronze fittings are cast and machined from extruded (C87700) or forged (C87710) Zero Lead Bronze. This gives the fitting high-corrosion and stress-crack resistance. All Viega PureFlow Press Zero Lead Bronze fittings are precision-made to tight tolerances for a consistent fit with Viega PureFlow PEX tubing. All PureFlow Press Zero Lead Bronze fittings meet the rigorous requirements of ANSI/NSF-61 Annex G for lead extraction and meet California AB 1953 no lead requirements. "Zero Lead" identifies Viega products meeting the lead free requirements of California and Vermont law, effective January 1, 2010, as tested and listed against NSF-61, Annex G.

The stainless steel press sleeves incorporate three (3) view holes and are manufactured from 304 stainless steel that will not corrode, maintaining a clean appearance for the lifetime of the system. The tool locator rings are color-coded to match their appropriately-sized PureFlow Press hand tool and are manufactured out of recycled plastic. (Stainless steel locator rings are used for solder adapters.)

### Markings

Viega PureFlow Press Zero Lead Bronze fittings with attached stainless steel sleeves are manufactured and certified to the requirements of ASTM F877. Viega PureFlow Press Zero Lead Bronze fittings and sleeves are marked with the size, manufacturer's mark, and required marking(s) of third-party certification organizations. Fittings also meet the requirements of ANSI/NSF-61 Annex G for health effects and are suitable for contact with potable water. NSF International and other certification organizations conduct random on-site inspections of manufacturing facilities and independently test Viega PureFlow Press Zero Lead Bronze fittings for compliance with physical, performance, and toxicological standards.

### Quality Assurance

When the product is marked with the ASTM F877 designation, it affirms that the product was manufactured, inspected, sampled, and tested in accordance with these specifications and has been found to meet the specified requirements.



This document is subject to updates. For the most current Viega technical literature, please visit [www.viega.us](http://www.viega.us).



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.**



Zero Lead identifies Viega products meeting the lead free requirements of NSF/ANSI/CAN 61 through testing under NSF/ANSI/CAN 372 (0.25% or less maximum weighted average lead content).

## Listings and Certificates

- cNSF<sup>®</sup>us pw-G
  - Zero lead listing meeting California AB 1953 and Vermont ACT 193
  - NSF International Performance and Health Effects (Standards 14 & 61)
  - NSF certified to CSA B137.5 (Canadian Standards Association)
- NSF Certified to NSF-U.P. Code
  - Approved for Uniform Plumbing Code, listed to ASTM F877
- IAPMO Certified
- ANSI/NSF 61-G
- ICC ES-PMG<sup>™</sup> 1038/1015 plumbing and heating systems



All fittings may not be listed with each organization shown.

## Recommended Uses

Viega PureFlow Press Zero Lead Bronze fittings with attached stainless steel press sleeves are intended and recommended for use in:

- Potable water distribution systems with Viega PureFlow PEX
- Hydronic heating, snow melt, and cooling systems with Viega PureFlow PEX and Barrier PEX tubing meeting the requirements of ASTM F876

Viega PureFlow Press Zero Lead Bronze fitting system components are available only from Viega and are not interchangeable with components and tubing from other suppliers. For information on other hot and cold applications not listed here, consult with your Viega representative.

## Friction Loss for Viega PureFlow Press Zero Lead Bronze Fittings

Size (inches)	Coupling	90° Elbow	Tee Run	Tee Branch
Equivalent length of PEX tubing in feet				
3/8	2.9	9.2	2.9	9.4
1/2	2	9.4	2.2	10.4
3/4	1	8	1	9
1	1	10	2	10
1 1/4	2	11	2	11
1 1/2	2	13	2	12
2	1	19	2	18

This information is based on tubing nominal flow rate (@ 8 fps flow velocity).

## Operating Parameters

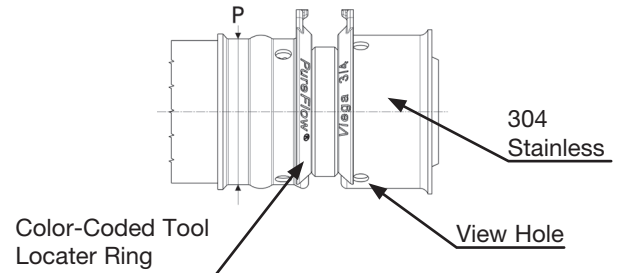
Maximum design temperature and pressure ratings are:

- 160 psi @ 73° F
- 100 psi @ 180° F
- 80 psi @ 200° F

## Handling and Installation

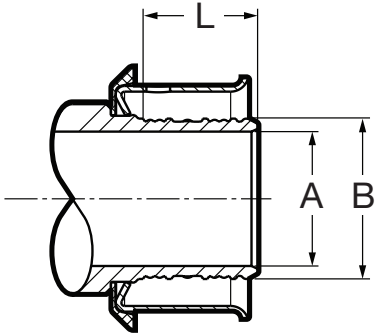
Viega PureFlow Press Zero Lead Bronze fittings are cast and machined from a solid bronze alloy and precision-made to tight tolerances. Use of these materials in hot and cold water distribution systems must be in accordance with good plumbing practices, applicable code requirements, and current installation practices available from Viega. Contact a Viega representative or the applicable code enforcement bureau for information about approvals for specific applications.

A pressed fitting has jaw witness marks (P) indicating the connection has been properly made.



Attached Stainless Sleeve, Pressed

## Typical Fitting Insert Dimensions for Viega PureFlow Press Zero Lead Bronze Fittings



Size (inches)	A	B	L
$\frac{5}{16}$	0.169	0.281±.002	0.496
$\frac{3}{8}$	0.236	0.344±.002	0.496
$\frac{1}{2}$	0.362	0.473±.002	0.496
$\frac{5}{8}$	0.457	0.571±.002	0.496
$\frac{3}{4}$	0.559	0.667±.003	0.496
1	0.728	0.858±.004	0.618
1¼	0.957	1.047±.004	0.866
1½	1.083	1.232±.004	0.866
2	1.417	1.606±.004	1.260

Dimensions are in English units. Tolerances shown are Viega requirements.

Viega PureFlow Press Zero Lead Bronze fittings are manufactured within these specifications.