

## Viega PureFlow® Crimp Eco Brass Fittings and Crimp Rings for Viega PureFlow PEX SDR-9 Cross-linked Polyethylene (PEX)

### Scope

This product specification designates the requirements for Viega PureFlow Crimp Zero Lead metallic fittings and copper crimp rings to be used as connections for Viega PureFlow PEX tubing in  $\frac{3}{8}$ ",  $\frac{1}{2}$ ",  $\frac{3}{4}$ " and 1" sizes. The connections are assembled with a full-circle crimp tool designed specifically for that purpose.

### Materials

Viega PureFlow Crimp Zero Lead metallic fittings are manufactured from extruded (C69300) or forged (C87850) Eco Brass with some fittings supplied in copper. All PureFlow PEX Crimp fittings are precision-made to tight tolerances for a consistent fit with PEX tubing. All Viega PureFlow Crimp Zero Lead metallic fittings meet the rigorous requirements of ANSI/NSF-61-G for lead extraction and meet the 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.

Copper crimp rings are manufactured from UNS C10200 or UNS C12200 copper alloy. Rings are annealed to 35-45 Rockwell 15T scale for ease of crimping.

### Marking and Certification

Viega PureFlow Crimp Zero Lead metallic fittings and rings are manufactured and certified to the requirements of ASTM F1807. PureFlow metallic Zero Lead PureFlow Crimp fittings and rings are marked with the F1807 designation, PureFlow, manufacturers mark, and required mark(s) of third-party certification organizations. Fittings meet the requirements of ANSI/NSF-61 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 Crimp Zero Lead metallic fittings for compliance with physical, performance and toxicological standards.

### Recommended Uses

Viega PureFlow Crimp Zero Lead metallic fittings and copper crimp rings are intended and recommended for use in potable water distribution systems with Viega PureFlow PEX tubing meeting the requirements of ASTM F876 . Maximum design temperature and pressure ratings are 160 psi @ 73°F and 100 psi @ 180°F. Viega PureFlow Crimp Zero Lead metallic fittings system components are interchangeable with components and tubing from other PEX suppliers, providing they are manufactured to the same ASTM specifications and the manufacturer approves the mixing of components. Viega has no control over the quality of other manufacturers, therefore we do not extend any warranty to those components that are not supplied by Viega. For information on other hot and cold applications not listed here, consult with your Viega representative.

### Handling and Installation

Viega PureFlow Crimp Zero Lead metallic fittings are extruded or forged Eco Brass 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.

## Quality Assurance

When the product is marked with the ASTM F1807 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.

## Certifications

### cNSF®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 F1807.



- IAPMO Certified



- ANSI/NSF 61-G



- ICC ES-PMG™ 1038

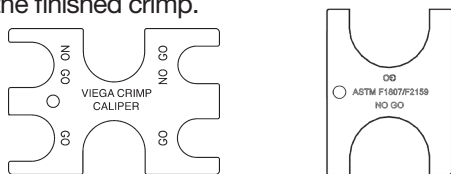
NOTE: All fittings may not be listed with each organization shown.

## Pressure Drop Table For Viega PureFlow Crimp Zero Lead metallic fittings Expressed in Equivalent Length of Tubing in Feet

SIZE	COUPLING	90° ELBOW	TEE RUN	TEE BRANCH
3/8"	2.9	9.2	2.9	9.4
1/2"	2.0	9.4	2.2	10.4
3/4"	.6	9.4	1.9	8.9
1"	1.3	10	2.3	11

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

**GO/NO GO Gauges:** Viega offers GO/NO GO gauge for easy testing of the finished crimp.



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.**

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

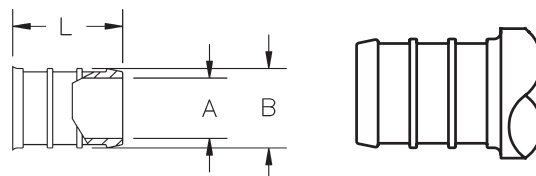
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## Viega PureFlow Crimp Zero Lead metallic fittings

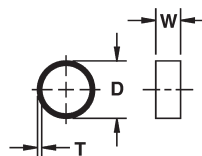
### Typical Fitting Insert Dimensions

SIZE	A	B	L
3/8"	.230	0.345±.004	.625
1/2"	.350	0.471±.004	.625
3/4"	.53	0.667±.004	.625
1"	.710	0.856±.004	.785

NOTE: Dimensions are in English units.  
Tolerances shown are ASTM requirements. Viega PureFlow Crimp Zero Lead metallic fittings are manufactured within these specifications.



## Copper Crimp Ring Dimensions Before Crimping

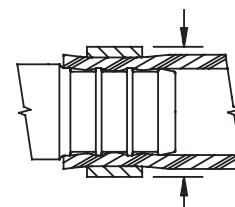


SIZE	D	W	T
3/8"	.630	.325	.058
1/2"	.750	.325	.056
5/8"	.875	.325	.056
3/4"	1.00	.325	.056
1"	1.25	.365	.049

All dimensions shown are nominal.

## Crimped Diameter Dimensions

Final crimped outside diameters shall fall within these dimensions when measured with a micrometer or caliper.



SIZE	MINIMUM	MAXIMUM
3/8"	ø 0.580"	ø 0.595"
1/2"	ø 0.700"	ø 0.715"
3/4"	ø 0.945"	ø 0.960"
1"	ø 1.175"	ø 1.190"

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