Tech Data

Viega Zero Lead Smart Loop® Internal Recirculation Kit Model 2976.1ZL

Description
Stagnant water can harbor dangerous pathogens in domestic water distribution systems. Reducing stagnation helps to maintain design temperature and residual disinfectant levels both of which reduce the propagation of waterborne pathogens, leading to a safer domestic water distribution system.

The Viega Smart Loop recirculation system utilizes an internal recirculation line, eliminating heat loss associated with the return line of a conventional recirculation system. With Viega Smart Loop, the installation of a separate return pipe is eliminated. The internal recirculation system saves time, material, space, and energy.

Features and Benefits
- Smart Connect® technology
- For use with Viega ProPress® systems
- Eliminates return pipe core drilling
- Eliminates return pipe fire caulking
- Eliminates return pipe insulation
- Requires fewer fittings and supports
- Reduces heat loss on return pipe
- Saves time on installation

Components
- Zero lead bronze
- 316 stainless steel
- ⅜” PEX tubing**

Operating Parameters
- System maximum operating temperature and pressure: 140°F @ 120 psi
- Total circulation length shall not exceed 325 feet

Listings and Certificates
- NSF-61
- ASTM F877

This document is subject to updates. For the most current Viega technical literature please visit 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 61 through testing under NSF/ANSI 372 (0.25% or less maximum weighted average lead content.)

**Not included in kit:
System Comparison
20% – 30% Energy Conservation by Reducing Heat Loss

1. Upper Adapter - Connection Set
2. Distribution Outlet
3. Hot Water Supply
4. Hot Water Return (Copper)
5. Lower Adapter - Connection Set
6. Hot Water Supply Riser
7. Hot Water Return (ViegaPEX)
8. Thermostatic Valve (Optional)

Pressure Drop vs. Flow Rate

1" & 1¼" Type L Copper Pipe with ½" PEX Internal Recirculation System

1½" & 2" Type L Copper Pipe with ½" PEX Internal Recirculation System

Conventional Circulation
Internal Recirculation System

Length of Pipe = 262 ft. Heat Loss = 1703 Btu/hr.
Length of Pipe = 262 ft. Heat Loss = 1211 Btu/hr.