# **Tech**Data



# PureFlow<sup>®</sup> MANABLOC<sup>®</sup> Parallel Water Distribution System For ViegaPEX<sup>™</sup>, ViegaPEX<sup>™</sup> Ultra and FostaPEX<sup>®</sup> SDR-9 Cross-linked Polyethylene (PEX)

#### Scope

This specification designates requirements for the PureFlow MANABLOC parallel water distribution system which supplies water to individual plumbing fixtures through dedicated ports and distribution lines. Each port (outlet) is equipped with a built-in shut-off valve to provide control for each fixture from a central location. The MANABLOC has separate hot and cold water inlets and ports to manage the entire plumbing system. A variety of standard and Zero Lead¹ fitting options are available for the MANABLOC distribution ports, including PEX Compression, Bronze PEX Press, Brass PEX Crimp and PolyAlloy PEX Crimp fittings. These distribution connections come complete with the MANABLOC when ordered. However, supply connections and fixture transition fittings are not included with the unit but are available separately.

#### **Materials**

The modular MANABLOC sections are molded from polysulfone (PLS) plastic. This material is used extensively in the medical industry and is highly resistant to hot water, chlorine and other chemicals typically found in potable water systems. The other components making up the MANABLOC consist of corrosion-resistant metals and engineered plastics that have been chosen specifically for each purpose. The stiffener used in the compression port fitting assembly is manufactured from 304 stainless steel.

#### **Marking and Certification**

MANABLOC units are marked with the product name, unit part number, material designation, production date and marks of third-party certifications by NSF International (NSF-pw) to ASTM F877, ANSI/NSF standards 14 and 61 CSA B137.5 and are listed with IAPMO as meeting the requirements of the Uniform Plumbing Code.

#### **Recommended Uses**

The MANABLOC is recommended for use in hot and cold potable water distribution systems in single and multifamily dwellings, as well as multiple-unit structures (apartments, condos, hotels, motels, etc.). Maximum pressure/temperature rating is 100 psi @ 180°F. The MANABLOC is not to be used directly in line with hot water domestic recirculation loops. PureFlow MANABLOC system components 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.

#### Handling and Installation

The MANABLOC must be protected from UV exposure and petroleum products that can damage them. 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.

#### **Capacities and K-Factor**

Specifications	English Units	SI
Main Waterway (each side)	1-1/4"	31.8mm
Main Inlet/Outlet Connection	1" Male NPSM	_
Fixture Ports	3/8" CTS and 1/2" CTS	9.5mm and 12.7mm
Fixture Port Rating (each)	3/8" - 2.5 GPM	3/8" - 9.5 LPM
(@ 8 FPS tubing velocity)	1/2" - 4 GPM	1/2" - 15.1 LPM
Fixture Port K-Factor	3/8"35	3/8" - 1.66 x 10 <sup>-3</sup>
	1/2"21	1/2" - 9.997 x 10 <sup>-4</sup>
	(PSI=KxGPM <sup>2</sup> )	(BAR=KxLPM <sup>2</sup> )
Main Bore Flow Capacity (each side) (2006 IPC Table 604.10.1)	31 GPM	` 117.3 LPM ´
Main Bore Through Feed K Factor	0.012	56.98x10 <sup>-6</sup>
(36 Ports with "Y" Block)	(PSI=KxGPM <sup>2</sup> )	(BAR=KxLPM <sup>2</sup> )
WSFU Capacity (each side) (2006 IPC, table E103.3)	` 60	` - ′

 <sup>&</sup>quot;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

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#### **Quality Assurance**

When the product is marked with the ASTM F877 designation, it affirms that all MANABLOC manifold control units are factory-assembled and pretested prior to delivery to the field. Viega utilizes protective packaging to reduce risk of damage during shipping and storage. MANABLOC manifolds are not intended to be fabricated or disassembled in the field. MANABLOC manifolds are intended for potable water use only.

## Certification cNSF®us pw-G

- Żero 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)



- IAPMO Certified

#### **MANABLOC Dimensions**

Total Ports	Length	
14	15 - 15/16"	
18	19 - 3/8"	
24	24 - 3/8"	
30	29 - 1/2"	
36	34 - 3/8"	

Dimensions reflect stock MANABLOC sizes.

### MANABLOC Pressure Drop Table Expressed as PSI Drop Through Port

Port Size	Rated Flow	PSI Drop
3/8"	2.5 gpm	2 psi
1/2"	4 gpm	3.4 psi



