

## Installation Manual

# Viega MegaPress® Stainless Systems



**viega**

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# 1 About This Document

## 1.1 Disclaimer



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.**

## 1.2 Symbols Used

The following symbols may be used within this document:



### **DANGER!**

This symbol warns of possible life-threatening injury.



### **WARNING!**

This symbol warns of possible serious injury.



### **CAUTION!**

This symbol warns of possible injury.



### **NOTICE!**

This symbol warns of possible damage to property.



Notes give additional helpful tips.

## 1.3 Audience

The information in this manual is directed at plumbing and mechanical professionals and trained personnel. Individuals without the abovementioned training or qualifications are not permitted to mount, install or, if required, maintain this product.

## 1.4 About This Version

This installation manual contains important information about the choice of product or system, assembly, and commissioning as well as intended use and, if required, maintenance measures. The information about the products, their properties, and application technology are based on the current standards in the United States and Canada.

Some passages in the text may refer to technical codes in the United States and Canada. These should serve as recommendations in the absence of corresponding national regulations. The information herein is not binding for other countries and regions. As mentioned above, it should be understood as a recommendation.

## 2 Product Information

### 2.1 MegaPress Stainless Systems

Viega MegaPress stainless steel fittings are available in both 304 and 316 alloys. The fittings are for use with iron pipe size (IPS) Schedule 5 to Schedule 40 stainless steel pipe in ½" to 2" sizes and Schedule 10 to Schedule 40 stainless steel pipe in 2½" to 4" sizes. These stainless steel fittings are suitable for a broad range of industrial uses, including fuel oils, acids, complex chemicals, and inert gases.

Viega MegaPress 304 FKM fittings and valve ends are constructed of 304 stainless steel, while MegaPress 316 and 316 FKM fittings and valve ends are constructed of 316L stainless steel. Both range from ½" to 4".

MegaPress 304 FKM fittings have a white dot with an FKM sealing element. MegaPress 316 fittings have a green dot with an EPDM sealing element. MegaPress 316 FKM fittings have a white dot with an FKM sealing element. All use Viega's unique Smart Connect® technology to help installers ensure that they have pressed all connections.

The Viega MegaPress Stainless fitting system requires no welding, soldering, brazing, or threading and poses no fire hazard, which is particularly important in restoration or retrofit work. The fittings are installed with electrohydraulic press tools (battery-powered or corded press tools).

### 2.2 Safety

Please read and understand the instructions before beginning installation to eliminate safety concerns and reduce risks associated with use and handling of Viega products.

### 2.3 Areas of Use

The system is intended for use in both commercial and industrial applications and is a replacement for welded, threaded, and rolled-groove connections in new installations and repairs. Only MegaPress 316 with an EPDM sealing element is approved for potable water. MegaPress Stainless fittings are not approved for use in fuel gas installations.

### 2.3.1 Approved Applications

Viega systems are designed for a wide range of applications across plumbing, heating, cooling, and various industrial uses. For detailed guidance on approved applications and compatible working fluids, please consult the [Viega Commonly Approved Applications Chart](#). If specific project requirements involve unique working fluids or conditions, or your intended application is not explicitly listed, you may submit an [Application Evaluation Form](#). This process allows our experts to review your specific needs and determine the suitability and compatibility of Viega products, ensuring optimal performance and system integrity for your project while maintaining proper warranty coverage.

### 2.3.2 Fire Protection Systems

MegaPress Stainless system components may be installed in NFPA 13, 13R, and 13D fire sprinkler systems. MegaPress 304 FKM and MegaPress 316 ½" to 2" fittings are certified for use in "wet" and "dry" fire protection systems in accordance with FM certifications. MegaPress 304 FKM and MegaPress 316 ½" to 3" fittings are certified for use in "wet" and "dry" fire protection systems in accordance with UL certifications.

- UL/ANSI 213: Standard for Rubber Gasketed Fittings for Fire-Protection Services
- ANSI/CAN/UL 213: 2019: Standard for Rubber Gasketed Fittings for Fire-Protection Service
- FM Class 1920: Pipe Couplings and Fittings for Aboveground Fire Protection Systems

MegaPress Stainless 4" fittings are not certified by UL or FM for use in fire protection systems.

**Permitted pressure:** 175 psi

**Pipe wall thickness:** Schedule 5 to Schedule 40

**Area of use (pipeline network):**

Wet sprinkler units:

- Piping network downstream of the alarm valve station

Dry sprinkler units:

- Piping network downstream of the alarm valve station

**Firefighting water additive:** Generally not permitted; exceptions only with the manufacturer's permission and prior agreement of Viega Technical Support.

### 2.3.3 Technical Assistance

Consult Viega's Customer Success Division for information on applications not listed or applications outside listed temperature and pressure ranges.

- Viega Technical Support: [techsupport@viega.us](mailto:techsupport@viega.us)
- Engineering Services: For more information on fire protection system design, radiant system design, and plumbing design services, contact [engineeringservices@viega.us](mailto:engineeringservices@viega.us)



## 2.4 Standards and Regulations

### 2.4.1 Overview

The following standards and regulations apply to the United States or Canada and are provided as a guideline.

### 2.4.2 Regulations: Applications

| Scope/notice                                     | Regulations Applicable in U.S./Canada |
|--------------------------------------------------|---------------------------------------|
| No application for fuel gases                    | Not allowed                           |
| Application in fire extinguishing systems        | NFPA 13, 13D, and 13R                 |
| Heating water for pump hot water heating systems | ICC LC1002                            |

**Table 1: Application regulations**

### 2.4.3 Standards: Pipes

| Standard    | Definition                                                                                     |
|-------------|------------------------------------------------------------------------------------------------|
| ASTM A312   | Standard specifications for steel, black and hot dipped, zinc-coated, welded, or seamless pipe |
| ASTM A554   | Standard specification for welded stainless steel mechanical tubing                            |
| ASTM A778   | Standard specification for welded, unannealed austenitic stainless steel tubular products      |
| ASME B36.10 | Welded and seamless wrought steel pipe                                                         |

**Table 2: Pipe standards**

### 2.4.4 Standards: Sealing Elements

| Standard   | Definition                                                                  |
|------------|-----------------------------------------------------------------------------|
| ASTM D2000 | Classification system for rubber products in automotive applications        |
| ASTM F1476 | Performance of gasketed mechanical couplings for use in piping applications |

**Table 3: Sealing element standards**

### 2.4.5 Standards: Pipe Hangers

| Standard  | Definition                                                    |
|-----------|---------------------------------------------------------------|
| MSS SP 58 | Pipe hangers and supports materials, design, and manufacturer |

**Table 4: Mounting standards**

## 2.4.6 Standards: Pressure Testing

| Standard                    | Definition                                                                               |
|-----------------------------|------------------------------------------------------------------------------------------|
| ASME B31                    | Pressure piping                                                                          |
| IAPMO / ANSI /<br>CAN Z1117 | Press and nail connections                                                               |
| ASTM F3226                  | Standard specification for metallic press-connect fittings for piping and tubing systems |
| IACS                        | Requirements concerning pipes and pressure vessels                                       |

Table 5: Pressure testing standards

## 2.5 Listings and Certifications

MegaPress 304 FKM, 316, and 316 FKM fittings have the following listings and certifications:

- ABS: American Bureau of Shipping Type Approval
- Canadian Registration Number (CRN): 23076.5 A/B/C
- IAPMO/ANSI/CAN Z1117: Press and Nail Connections
- ICC-ES LC1002: Press-Connection Fittings for Potable Water Tube and Radiant Heating Systems

In addition to the listings and certifications above, MegaPress 304 FKM and 316 fittings have the following listings and certifications:

- BV: Bureau Veritas Type Approval
- DNV GL: Det Norske Veritas Germanischer Lloyd Type Approval
- LR: Lloyd's Register Type Approval
- NKK: Nippon Kaija Kyokai Type Approval
- FM Class 1920: Pipe Couplings and Fittings for Aboveground Fire Protection Systems (½" to 2" fittings only)
- UL/ANSI 213: Standard for Rubber Gasketed Fittings for Fire-Protection Service (½" to 3" fittings only)
- ANSI/CAN/UL 213: 2019: Standard for Rubber Gasketed Fittings for Fire-Protection Service (½" to 3" fittings only)

MegaPress 316 fittings also have the following listings and certifications:

- NSF/ANSI 61: Drinking Water System Components – Health Effects
- NSF/ANSI 372: Drinking Water System Components – Lead Content

## 2.6 Codes and Standards



It is the responsibility of the installer or any other parties to adhere to all applicable local rules and regulations governing the nature of the installation.

MegaPress 304 FKM, 316, and 316 FKM fittings comply with the following codes and standards:

- ASME B31: Code for Pressure Piping
- ASME B31.1: Power Piping
- ASME B31.3: Process Piping
- ASME B31.9: Building Service Piping
- IAPMO Uniform Mechanical Code (UMC)
- ICC International Mechanical Code (IMC)
- ICC International Residential Code (IRC)
- National Building Code of Canada (NBCC)
- National Plumbing Code of Canada (NPCC)
- IASTM A312: Standard Specification for Seamless, Welded and Heavily Cold Worked Austenitic Stainless Steel Pipes
- ASTM A554: Standard Specification for Welded Stainless Steel Mechanical Tubing

In addition to the compliance above, MegaPress 304 FKM and 316 fittings comply with the following codes and standards:

- NFPA 13: Standard for the Installation of Sprinkler Systems
- NFPA 13D: Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes
- NFPA 13R: Standard for the Installation of Sprinkler Systems in Low-Rise Residential Occupancies

MegaPress 316 fittings also comply with the following codes and standards:

- IAPMO California Plumbing Code (CPC)
- IAPMO National Standard Plumbing Code (NSPC)
- IAPMO Uniform Plumbing Code (UPC)
- ICC International Plumbing Code (IPC)

## 2.7 Product Description

### 2.5.1 Overview

The MegaPress Stainless system consists of press connectors for stainless steel pipes and the corresponding press tools. MegaPress press jaws, actuator, and rings are available for various dimensions. Their constant compression produces a positive, nondetachable, mechanical joint. The system components are available in the following dimensions: ½", ¾", 1", 1¼", 1½", 2", 2½", 3", and 4".

## 2.7.1 Pipes

Viega MegaPress Stainless ½" to 4" fittings are compatible with ASTM A312 stainless steel pipe, Schedule 5 to Schedule 40, for ½" to 2" fittings and Schedule 10 to Schedule 40 stainless steel pipe for 2½" to 4" fittings. Fittings are for use with both annealed and unannealed pipe.



If the pipe has been coated, the maximum external diameter listed in the tables on the next page must not be exceeded.

### 2.7.1.1 Schedule 5 Pipe

| Pipe size<br>(in) | Outside diameter |       | Wall thickness |      |
|-------------------|------------------|-------|----------------|------|
|                   | (in)             | (mm)  | (in)           | (mm) |
| ½                 | 0.84             | 21.3  | 0.065          | 1.65 |
| ¾                 | 1.05             | 26.7  | 0.065          | 1.65 |
| 1                 | 1.32             | 33.4  | 0.065          | 1.65 |
| 1¼                | 1.66             | 42.2  | 0.065          | 1.65 |
| 1½                | 1.9              | 48.3  | 0.065          | 1.65 |
| 2                 | 2.375            | 60.3  | 0.083          | 2.11 |
| 2½                | 2.875            | 73.0  | 0.083          | 2.11 |
| 3                 | 3.5              | 88.9  | 0.083          | 2.11 |
| 4                 | 4.5              | 114.3 | 0.083          | 2.11 |

Table 6: Schedule 5 pipe sizing

### 2.7.1.2 Schedule 10 Pipe

| Pipe size<br>(in) | Outside diameter |       | Wall thickness |      |
|-------------------|------------------|-------|----------------|------|
|                   | (in)             | (mm)  | (in)           | (mm) |
| ½                 | 0.84             | 21.3  | 0.083          | 2.11 |
| ¾                 | 1.05             | 26.7  | 0.083          | 2.11 |
| 1                 | 1.32             | 33.4  | 0.109          | 2.77 |
| 1¼                | 1.66             | 42.2  | 0.109          | 2.77 |
| 1½                | 1.9              | 48.3  | 0.109          | 2.77 |
| 2                 | 2.375            | 60.3  | 0.109          | 2.77 |
| 2½                | 2.875            | 73.0  | 0.12           | 3.05 |
| 3                 | 3.5              | 88.9  | 0.12           | 3.05 |
| 4                 | 4.5              | 114.3 | 0.12           | 3.05 |

Table 7: Schedule 10 pipe sizing

### 2.7.1.1 Schedule 40 Pipe

| Pipe size<br>(in) | Outside diameter |       | Wall thickness |      |
|-------------------|------------------|-------|----------------|------|
|                   | (in)             | (mm)  | (in)           | (mm) |
| ½                 | 0.84             | 21.3  | 0.109          | 2.77 |
| ¾                 | 1.05             | 26.7  | 0.113          | 2.87 |
| 1                 | 1.32             | 33.4  | 0.133          | 3.38 |
| 1¼                | 1.66             | 42.2  | 0.14           | 3.56 |
| 1½                | 1.9              | 48.3  | 0.145          | 3.68 |
| 2                 | 2.375            | 60.3  | 0.154          | 3.91 |
| 2½                | 2.875            | 73.0  | 0.203          | 5.16 |
| 3                 | 3.5              | 88.9  | 0.216          | 5.49 |
| 4                 | 4.5              | 114.3 | 0.237          | 6.02 |

**Table 8: Schedule 40 pipe sizing**

### 2.7.2 Viega MegaPress Stainless Pipe Marking Guide

| Usage                         | Material Properties                                                                                                                                                       | Type of Application (typical)                                                                                           | Color Scheme           |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------|
| Hazardous materials           | <ul style="list-style-type: none"> <li>Flammable or explosive</li> <li>Chemically active or toxic</li> <li>Radioactive</li> <li>Extreme temperature / pressure</li> </ul> | <ul style="list-style-type: none"> <li>Process piping</li> <li>High-pressure steam</li> <li>Acids/corrosives</li> </ul> | <b>YELLOW ON BLACK</b> |
| Low-hazard materials (liquid) | <ul style="list-style-type: none"> <li>Liquid</li> <li>Liquid admixture</li> </ul>                                                                                        | <ul style="list-style-type: none"> <li>Cooling water</li> <li>Greywater</li> <li>Chilled water</li> </ul>               | <b>WHITE ON GREEN</b>  |
| Low-hazard materials (gas)    | <ul style="list-style-type: none"> <li>Gas</li> <li>Gas admixture</li> </ul>                                                                                              | <ul style="list-style-type: none"> <li>Compression air</li> <li>Nitrogen (N2)</li> <li>Argon (Ar)</li> </ul>            | <b>WHITE ON BLUE</b>   |
| Fire suppression              | <ul style="list-style-type: none"> <li>Liquid</li> <li>Gas</li> <li>Foam</li> </ul>                                                                                       | <ul style="list-style-type: none"> <li>Sprinklers (wet/dry)</li> <li>CO2</li> <li>Foam (AFFF)</li> </ul>                | <b>WHITE ON RED</b>    |

**Table 9: Guide to the ANSI A13.1 standard for the identification of pipes**

All Viega MegaPress Stainless piping systems should be continuously marked in accordance with ANSI A13.1 or as required by the local authority having jurisdiction.

| Pipe O.D. including covering |                 | Minimum length of label field color |        | Minimum height of letters |       |
|------------------------------|-----------------|-------------------------------------|--------|---------------------------|-------|
| ¾" to 1¼"                    | 19 mm to 32 mm  | 8"                                  | 203 mm | ½"                        | 13 mm |
| 1½" to 2"                    | 38 mm to 51 mm  | 8"                                  | 203 mm | ¾"                        | 19 mm |
| 2½" to 4"                    | 64 mm to 108 mm | 12"                                 | 305 mm | 1¼"                       | 32 mm |

**Table 10: Pipe markers**

#### Marker Placement

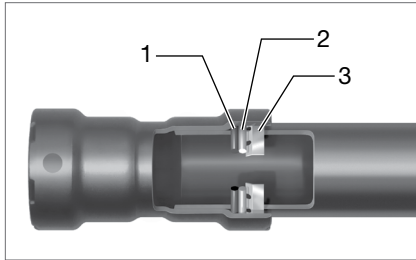
- At all changes in direction
- At both sides of any penetrations (valves, flanges, tees, etc.)
- At frequent intervals on straight run (50 feet is typical)
- Locate pipe markers so they are readily visible
- Provide arrows indicating direction of flow

**Note:** This guide is for general information purposes only. Pipe markings must be in accordance with local code requirements.

## 2.7.3 Press Fittings

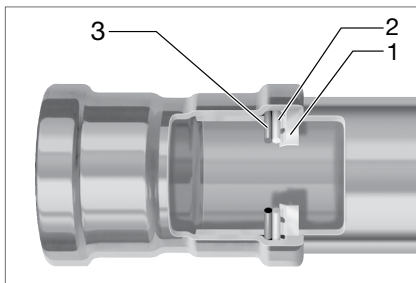
Press fittings are available in a number of configurations and sizes. An overview of the press fittings suitable for a system can be found in the catalog.

### 2.7.3.1 Viega MegaPress Stainless ½" to 2" Fittings



- 1 Each fitting contains an applicationspecific sealing element.
- 2 The 304 stainless steel separator ring ensures that the sealing element and grip ring perform at maximum capacity by providing a positive physical separation.
- 3 The grip ring is a 420 stainless steel ring with bidirectional teeth that grip the pipe and ensure that the fitting is locked securely to the piping.

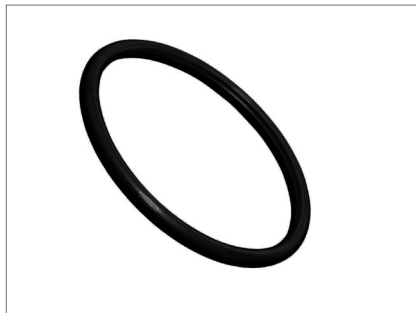
### 2.7.3.2 Viega MegaPress Stainless 2½" to 4" Fittings



- 1 The 420 stainless steel grip ring's teeth cut into the pipe and lock the fitting securely in place.
- 2 A polybutylene terephthalate (PBT) separator ring protects the sealing element from damage by creating a positive physical separation during installation and later during pressing.
- 3 The sealing element ensures watertight or airtight connections.

MegaPress Stainless 2½" to 4" fittings are designed to be pressed with MegaPress XL press rings and Z3 actuator to produce a non-detachable, secure connection.

### 2.7.3.3 FKM Sealing Element



Viega MegaPress 304 FKM and 316 FKM fittings are manufactured with a high-quality, dull black fluoroelastomer (FKM) sealing element installed at the factory. Sealing elements are inserted into the fitting using an H1 food grade lubricant that is registered with NSF and the USDA and is approved for use under FDA 21 CFR.

FKM possesses excellent resistance to aging, ozone, sunlight, weathering, environmental influences, oils, and petroleum-based additives. Its superb resistance to high temperatures and petroleum-based additives makes it ideal for seals and gaskets in solar, district heating, low-pressure steam, and compressed air system fittings.

The operating temperature of the FKM sealing element is 14°F to 284°F (-10° to 140°C). It can withstand heat spikes up to 356°F.

### 2.7.3.4 EPDM Sealing Element

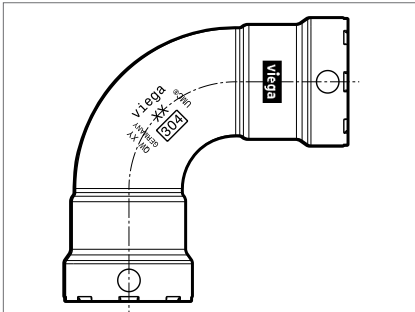


Viega MegaPress 316 fittings are manufactured with a high-quality, shiny black ethylene propylene diene monomer (EPDM) sealing element installed at the factory. Sealing elements are inserted into the fitting using an H1 food grade lubricant that is registered with NSF and the USDA and is approved for use under FDA 21 CFR.

The EPDM sealing element possesses excellent resistance to aging, ozone, sunlight, weathering, environmental influences, and most alkaline solutions and chemicals used in a broad range of applications.

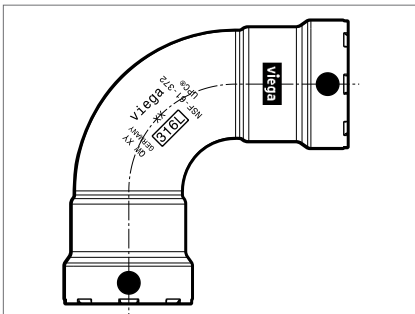
The operating temperature of the EPDM sealing element is 0° to 250°F (-18° to 120°C).

### 2.7.3.5 Fitting Markings



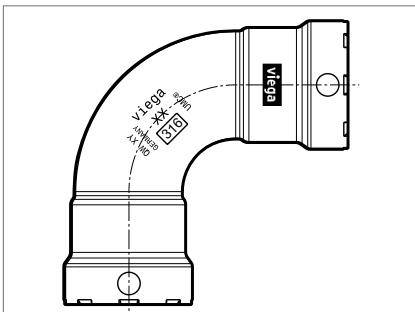
Each MegaPress 304 FKM fitting is marked with the following:

- White dot – identifies FKM sealing element and Smart Connect technology
- Size of fitting
- Manufacturer name
- Manufacturer date code
- Country of origin
- Batch code
- UMC®



Each MegaPress 316 fitting is marked with the following:

- Green dot – identifies EPDM sealing element and Smart Connect technology
- Size of fitting
- Manufacturer name
- Manufacturer date code
- Country of origin
- Batch code
- NSF®-61-372
- UPC®



Each MegaPress 316 FKM fitting is marked with the following:

- White dot – identifies FKM sealing element and Smart Connect technology
- Size of fitting
- Manufacturer name
- Manufacturer date code
- Country of origin
- Batch code
- UMC®

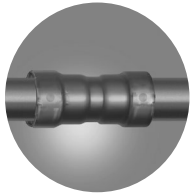
### 2.7.3.6 Viega Smart Connect Technology



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



**2** Upon identification, use the press tool to press the fitting, making a secure leak-proof connection.



**3** Viega MegaPress connections are fast, flameless, and reliable.

Viega Smart Connect technology provides the installer quick and easy identification of an unpressed fitting during a leak test. When the fitting is pressed, a secure, non-detachable, mechanical connection is created. Smart Connect technology provides the installer with an easy way to see connections that have not been pressed before putting the system into operation.



Testing for leaks using Viega Smart Connect is not a replacement for testing requirements of local codes and standards. If testing with compressed air, it is necessary to use an approved leak-detect solution.

## 2.8 General Installation Requirements

The following general industry requirements must be considered while installing the Viega MegaPress fitting system.

### 2.8.1 Required Tools

The following tools are required for making a press connection:

- Pipe cutter or a fine-toothed hacksaw
- Deburring tool
- Marker for marking insertion depth on pipe
- Press machine with constant pressing force
- Press jaw or press ring with corresponding actuator suitable for the pipe diameter and with the proper profile



#### **Improper tool/material damage**

Use only press jaws and rings that are designed for use with MegaPress fittings.



| Tool                             | Attachments               | MegaPress Sizes (in) |
|----------------------------------|---------------------------|----------------------|
| <b>Viega Pressgun 6</b>          | Standard jaws             | ½ – 1                |
|                                  | V1 actuator and rings     | –                    |
|                                  | V2 actuator and rings     | 1¼ – 2               |
| <b>Viega Pressgun Picco 6</b>    | Compact jaws              | ½ – ¾                |
|                                  | C1 actuator and rings     | ½ – 1¼               |
| <b>RIDGID 330/340/350</b>        | Standard jaws             | ½ – 1                |
|                                  | V2 actuator and rings     | 1¼ – 2               |
|                                  | MegaPress XL PressBooster | 2½ – 4               |
| <b>RIDGID 240/241</b>            | Compact jaws              | ½ – 1                |
|                                  | C1 actuator and rings     | ½ – 1¼               |
| <b>RIDGID RP 342-XL</b>          | Standard jaws             | ½ – 1                |
|                                  | V2 actuator and rings     | 1¼ – 2               |
|                                  | Z3 actuator and rings     | 2½ – 4               |
| <b>Milwaukee M12 Force Logic</b> | M12 jaws                  | ½ – 1                |
| <b>Milwaukee M18 Force Logic</b> | M18 jaws                  | ½ – 1                |
|                                  | M18 rings                 | 1¼ – 2               |
| <b>Milwaukee M18 Long Throw</b>  | M18 jaws                  | ½ – 1                |
|                                  | M18 rings                 | 1¼ – 2               |
|                                  | Z3 actuator and rings     | 2½ – 4               |

Table 11: Press tools matrix

## 2.8.2 Expansion

Pipelines expand with heat. Heat expansion is dependent on the material. Thermal expansion in installed systems generates stress on pipes and appliance connectors. Compensation must be allowed for expansion and contraction that may occur within the piping system. Expansion joints or mechanical expansion compensators may be used to alleviate these stresses.

The following methods are effective:

- Fixed and sliding hangers
- Expansion equalization joints (expansion bends)
- Expansion compensators

## 2.8.3 Exposure to Freezing Temperatures

Viega MegaPress 316 systems with EPDM sealing elements can be installed in ambient temperatures as low as 0° F. Viega MegaPress 304 FKM and 316 FKM systems with FKM sealing elements can be installed in ambient temperatures as low as 14°F.

Piping systems exposed to freezing temperatures must be protected per acceptable engineering practices and codes and as required by the local authority.

## 2.8.4 Underground Installations

Viega MegaPress Stainless fitting systems are all approved for underground installations. However, installations must meet all state and local codes, including those for underground. Proper authorization must be obtained prior to installation from the local authority. When installing underground, Viega suggests that all MegaPress Stainless systems, as well as the installed pipe, be coated or wrapped to prevent corrosion.

## 2.8.5 Concealed Spaces

The Viega MegaPress Stainless fitting system is approved for use in concealed spaces. Specific performance tests were conducted to evaluate the fittings for use in concealed spaces. Concealed tubing and fittings must be protected from puncture threats.

## 2.8.6 Electrical Bonding

When properly installed, MegaPress Stainless 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 pipe. The press ensures the continuity of the bonding through this contact.



A qualified electrician is responsible for ensuring electrical bonding is tested and secured.



### **DANGER!** **Electric shock**

An electric shock can cause burns, serious injury, or death.

- Because all metallic piping can conduct electricity, unintentional contact with a live wire can cause the entire system and components connected to it to become energized. Metal piping is not meant to conduct electricity.
- A properly bonded system creates a safe path for electricity to travel so that the system can't be energized.
- An unbonded or improperly bonded system can be a shock hazard.
- Always ensure bonding is in accordance with local codes.

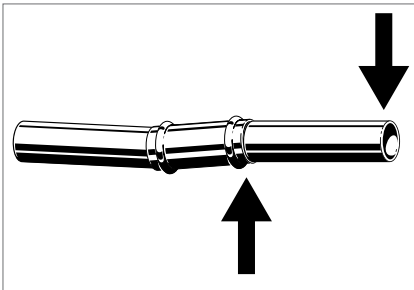
## 2.8.7 Corrosion Protection

Viega MegaPress Stainless 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 satisfying local code requirements.

Care should be taken to select hangers of a suitable material that is galvanically compatible with the piping system. In addition, systems should be properly sized to minimize the risk of erosion corrosion resulting from excessive velocities.

In some cases, the local authority may require pipe and fittings to be painted. Installers should use caution to avoid saturating the fittings with paint and take care to not allow excess paint to accumulate on the fitting hub. Failure to use caution could result in a premature failure.

## 2.8.8 Deflection



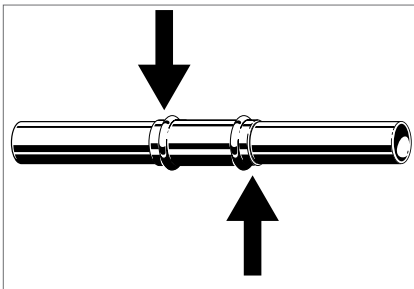
The pressing process can cause deflection (angular misalignment). When pressing Viega MegaPress Stainless fittings in a system, the deformation of the fitting is constant. This allows for a consistent leak-free joint every time and is a result of the pressing technique.

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 pipe end will deflect in the opposite direction.
- By counteracting the fitting movement, the installer can minimize the deflection of the fitting and ultimately the pipe.
- When using strut and clamps, deflection is minimized and nearly eliminated depending on clamp spacing.

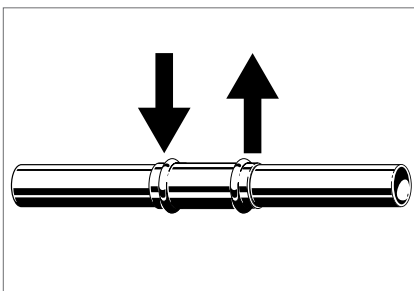
### 2.8.8.1 Controlling Deflection

Deflection while pressing can be minimized with the following installation practices.



#### Alternate press directions

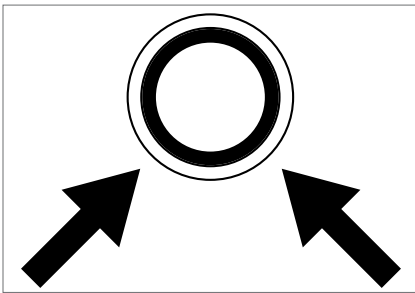
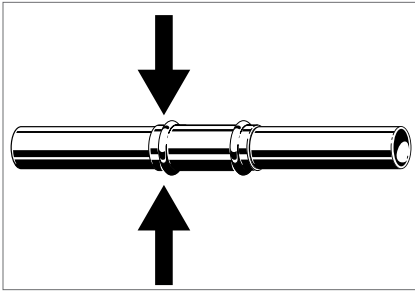
- Press one end of fitting.
- Make second press on other end of fitting from the opposite side, site conditions permitting.



#### 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 pipe 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.



- As long as the pipe is properly prepped and marked and the fitting is installed according to Viega's MegaPress Product Instructions, if there is any deflection present after the installation of the fitting, the connection is still acceptable and meets Viega's manufacturing specifications for proper installation and warranty.
- Deflection of a press connection has no effect on the integrity of the system, and it can be pressure tested in accordance with the MegaPress Product Instructions.

## 3 Handling Instructions

All Viega MegaPress Stainless components and associated pipe must be free from dirt, debris, or other items that may interfere with the sealing element and the press connection. Viega MegaPress Stainless sealing elements, separator rings, and grip rings must be visually inspected prior to installation to ensure the seal is intact and properly located within the fitting.

### 3.1 Transport

When transporting fittings:

- Do not pull or drag the fittings or system components along other surfaces.
- Secure fittings, piping, and system components during transportation to keep them from shifting.
- Do not damage the protective cap on components or pipe ends.
- Do not remove protective caps until immediately before installing.

### 3.2 Storage

When storing materials:

- Store fittings, pipe, and system components in a clean and dry place.
- Do not store components directly on the floor.
- Provide at least three points of support for the storage of piping.
- Where possible, store different sizes separately.
- Store small sizes on top of larger sizes if separate storage is not possible.
- Store fittings, pipe, and system components of different materials separately to prevent contact corrosion.

### 3.3 Pipe Preparation

Pipe surfaces for each type of pipe must be smooth; must be free of indentations (even and undamaged), pits, and deformations; and must be clean and free of dirt, debris, rust, scale, oil, and grease. It is not necessary to completely remove protective coatings or to expose the bare steel material. Install MegaPress fittings on plain end pipe only. Pressing fittings directly over threads will result in an improper seal.

To avoid leak paths, engraved or stamped pipe must not be used with the Viega MegaPress fitting system. Engraving or stamping must not be removed through use of a grinder or other tool.

In systems where complete corrosion protection is required (e.g., cooling systems), apply suitable corrosion protection to the previously processed pipe surfaces that are still uncovered after pressing.

The Viega MegaPress Stainless system does not require lubrication of the pipe or the fitting.

## 4 Installation Instructions

### 4.1 Check System Components

System components may, in some cases, become damaged through transportation and storage.

- Check all parts.
- Replace damaged components.
- Do not repair damaged components.
- Contaminated components may not be installed.

### 4.2 Installing and Mounting the Pipe

Observe the general rules of hanging and mounting:

- Do not use fixed piping as support for other piping and components.
- Do not use pipe hooks.
- Observe distance between fittings and mounting points.
- Observe the expansion direction – plan fixed and sliding mounts.

#### 4.2.1 Pipe Hangers and Supports

Piping supports perform two functions:

- To provide support for the piping.
- To guide the pipe during thermal expansion and contraction.



#### **Fittings must not be used as support**

- System malfunction may result from additional stress and strain put on the fitting.
- At no point in the system should a fitting be the sole means of support. For example, when installing a tee, both the branch and the trunk must be properly supported.

Industry standard practices and guidelines must be followed for pipe layout and support. Supports, hangers, and anchors must be installed in a manner that does not interfere with the free expansion and contraction of the piping. All parts of the support equipment need to be designed and installed not to disengage due to movement of the supported piping. Sliding hangers must be positioned so that they cannot unintentionally become rigid hangers when the system is in use.

Hangers and supports must conform to local code requirements. In the absence of local code requirements, hangers and supports should conform to ANSI/MSS SP 58 Pipe Hangers and Supports – Materials, Design, Manufacture, Selection, Application and Installation. Only pipe clamps with chloride-free noise insulation inlays should be used to secure the pipes.

| Pipe diameter (in) | Maximum span (feet) | Minimum rod diameter (in) |
|--------------------|---------------------|---------------------------|
| ½                  | 7                   | ⅜                         |
| ¾                  | 7                   | ⅜                         |
| 1                  | 7                   | ⅜                         |
| 1¼                 | 7                   | ⅜                         |
| 1½                 | 9                   | ⅜                         |
| 2                  | 10                  | ⅜                         |
| 2½                 | 11                  | ½                         |
| 3                  | 12                  | ½                         |
| 4                  | 14                  | ½                         |

**Table 12: Pipe hanger spacing**

## 4.2.2 Transition Fittings

### 4.2.2.1 Threaded Connections

The Viega MegaPress systems can be joined with off-the-shelf threaded fittings. In this case:

- The threaded connection is made first.
- The press connection is made second.

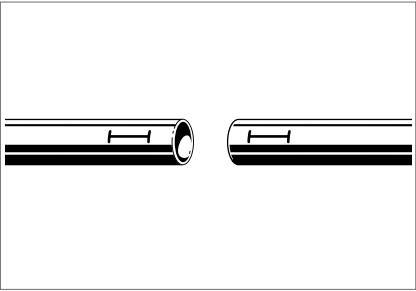
This process avoids unnecessary torsion on the press fitting.

### 4.2.2.2 Flange Connections

When using Viega flanges, bolt the flange end in place prior to pressing the fitting to the pipe.

### 4.2.3 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 pipe 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. Both the minimum and the maximum insertion depths must be marked, with a line connecting the two marks.



| Pipe diameter<br>(in) | Minimum insertion depth |      | Maximum insertion depth |      |
|-----------------------|-------------------------|------|-------------------------|------|
|                       | (in)                    | (mm) | (in)                    | (mm) |
| 1/2                   | 1 1/16                  | 27   | 1 5/8                   | 41   |
| 3/4                   | 1 3/16                  | 30   | 1 13/16                 | 46   |
| 1                     | 1 3/8                   | 35   | 1 15/16                 | 49   |
| 1 1/4                 | 1 13/16                 | 46   | 2 1/2                   | 64   |
| 1 1/2                 | 1 7/8                   | 48   | 2 3/4                   | 70   |
| 2                     | 2                       | 51   | 2 3/4                   | 70   |
| 2 1/2                 | 1 13/16                 | 46   | 3 1/8                   | 79   |
| 3                     | 2 5/16                  | 59   | 3 11/16                 | 94   |
| 4                     | 3 1/8                   | 80   | 4 3/8                   | 111  |

**Table 13: Insertion depths for MegaPress no-stop couplings**



## 4.3 Space Requirements and Intervals



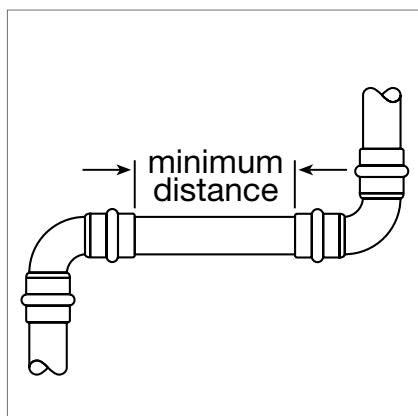
### Not enough space

Malfunctions may arise from improper technique.

- Adhere to minimum space requirements.
- Make sure that the space required for pressing tools is available if fittings will be pressed immediately upstream or downstream from wall or ceiling penetrations.
- Take the minimum required distances into consideration during the planning phase of the project whenever possible.

### 4.3.1 Minimum Distance Between Fittings

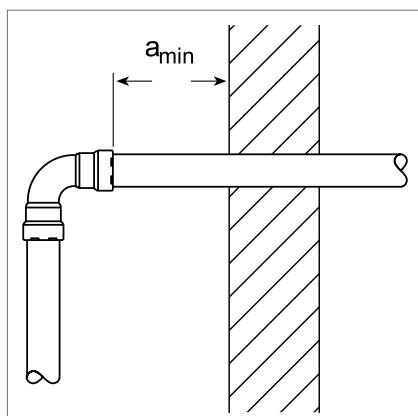
To ensure a correct press, a minimum distance between press fittings must be maintained. Failure to provide this distance may result in an improper seal.



| Pipe diameter<br>(in) | Minimum distance |      |
|-----------------------|------------------|------|
|                       | (in)             | (mm) |
| 1/2                   | 1/4              | 7    |
| 3/4                   | 1/4              | 7    |
| 1                     | 1/4              | 7    |
| 1 1/4                 | 1/2              | 13   |
| 1 1/2                 | 1/2              | 13   |
| 2                     | 1/2              | 13   |
| 2 1/2                 | 1/2              | 13   |
| 3                     | 1/2              | 13   |
| 4                     | 1/2              | 13   |

Table 14: Minimum distance between MegaPress fittings

### 4.3.2 Minimum Space Requirements



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

| Pipe diameter<br>(in) | A minimum |      |
|-----------------------|-----------|------|
|                       | (in)      | (mm) |
| 1/2 to 1              | 1 1/2     | 39   |
| 1 1/4 to 2            | 3/8       | 10   |
| 2 1/2 to 4            | 3/8       | 10   |

Table 15: MegaPress minimum distance for press jaws between pipe and wall – RIDGID RP241, RP320, RP330, RP340, CT400 and Milwaukee M18 press tools

### 4.3.3 MegaPress Jaws Clearance Requirements

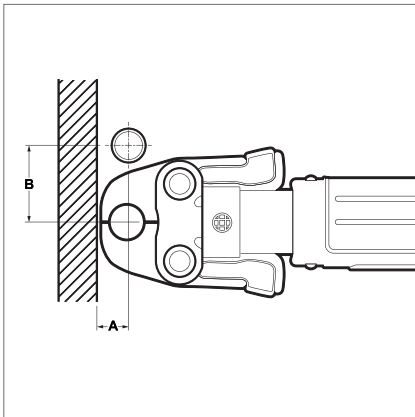
The minimum distance between pipes, or between the pipe and the wall/ceiling construction, must be taken into consideration in the planning phase for a problem-free work process. The following illustrates the clearance requirements for jaws and fittings and the procedure for pressing fittings in tight quarters.



#### Pipes installed too closely together

Connection may leak without proper clearance.

- Adhere to minimum intervals between fittings.
- Insert pipe to full insertion depth before pressing.

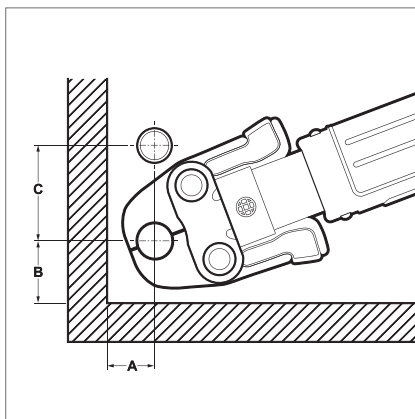


| Pipe diameter<br>(in) | A minimum |      | B minimum |      |
|-----------------------|-----------|------|-----------|------|
|                       | (in)      | (mm) | (in)      | (mm) |
| 1/2                   | 1         | 26   | 2 5/8     | 67   |
| 3/4                   | 1 1/4     | 32   | 3 1/8     | 79   |
| 1                     | 1 3/4     | 45   | 3 5/8     | 93   |

Table 16: MegaPress standard jaws clearance requirements

| Pipe diameter<br>(in) | A minimum |      | B minimum |      |
|-----------------------|-----------|------|-----------|------|
|                       | (in)      | (mm) | (in)      | (mm) |
| 1/2                   | 1 1/4     | 32   | 2 7/8     | 74   |
| 3/4                   | 1 5/8     | 29   | 3         | 77   |

Table 17: MegaPress compact jaws clearance requirements



| Pipe diameter<br>(in) | A minimum |      | B minimum |      | C minimum |      |
|-----------------------|-----------|------|-----------|------|-----------|------|
|                       | (in)      | (mm) | (in)      | (mm) | (in)      | (mm) |
| 1/2                   | 1 1/4     | 32   | 1 7/8     | 48   | 3         | 77   |
| 3/4                   | 1 1/2     | 39   | 2 1/8     | 54   | 3 1/2     | 89   |
| 1                     | 2         | 51   | 2 1/2     | 64   | 4         | 102  |

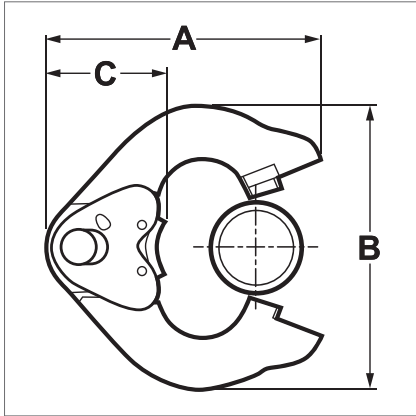
Table 18: MegaPress standard jaws clearance requirements between pipe, wall, and floor

| Pipe diameter<br>(in) | A minimum |      | B minimum |      | C minimum |      |
|-----------------------|-----------|------|-----------|------|-----------|------|
|                       | (in)      | (mm) | (in)      | (mm) | (in)      | (mm) |
| 1/2                   | 1 1/2     | 39   | 2 1/8     | 54   | 3 1/8     | 80   |
| 3/4                   | 1 3/8     | 35   | 2 1/8     | 54   | 3 3/8     | 86   |

Table 19: MegaPress compact jaws clearance requirements between pipe, wall, and floor

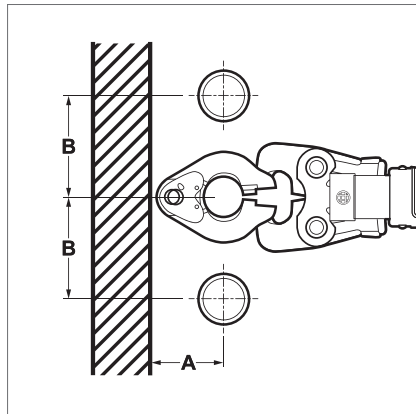
#### 4.3.4 MegaPress Rings Clearance Requirements

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



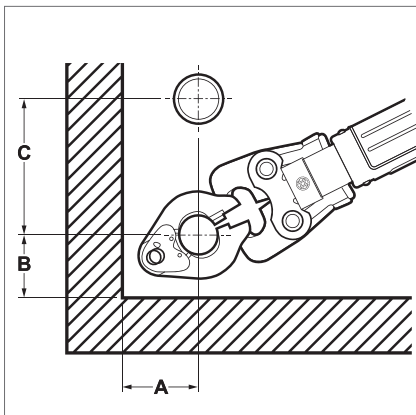
| Pipe diameter<br>(in) | A<br>minimum |      | B<br>minimum |      | C<br>minimum |      |
|-----------------------|--------------|------|--------------|------|--------------|------|
|                       | (in)         | (mm) | (in)         | (mm) | (in)         | (mm) |
| 1¼                    | 6            | 153  | 6¼           | 159  | 2½           | 64   |
| 1½                    | 6            | 153  | 6¾           | 172  | 2⅝           | 67   |
| 2                     | 6            | 153  | 6⅞           | 175  | 2½           | 64   |
| 2½                    | 6⅝           | 169  | 7⅝           | 194  | 2½           | 64   |
| 3                     | 7½           | 191  | 8⅞           | 226  | 2½           | 64   |
| 4                     | 8½           | 216  | 10⅝          | 264  | 2⅝           | 67   |

Table 20: MegaPress ring dimensions



| Pipe diameter<br>(in) | A minimum |      | B minimum |      |
|-----------------------|-----------|------|-----------|------|
|                       | (in)      | (mm) | (in)      | (mm) |
| 1¼                    | 3¾        | 96   | 4⅞        | 124  |
| 1½                    | 4         | 102  | 5⅞        | 131  |
| 2                     | 4         | 102  | 5⅞        | 137  |
| 2½                    | 4½        | 115  | 5⅞        | 150  |
| 3                     | 4¾        | 121  | 6¾        | 172  |
| 4                     | 5⅞        | 137  | 8¼        | 210  |

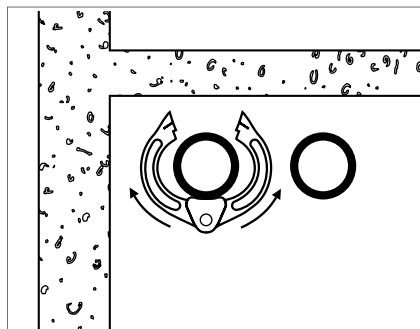
Table 21: MegaPress rings with V2/V3 actuator clearance requirements



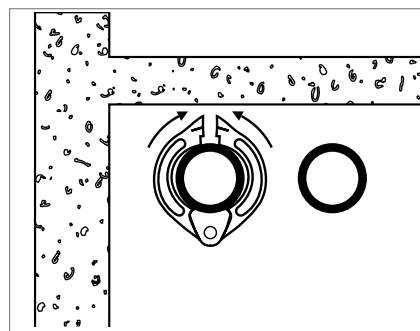
| Pipe diameter<br>(in) | A<br>minimum |      | B<br>minimum |      | C<br>minimum |      |
|-----------------------|--------------|------|--------------|------|--------------|------|
|                       | (in)         | (mm) | (in)         | (mm) | (in)         | (mm) |
| 1¼                    | 3¾           | 96   | 3¾           | 96   | 4⅞           | 124  |
| 1½                    | 4            | 102  | 4            | 102  | 5⅞           | 131  |
| 2                     | 4            | 102  | 4            | 102  | 5⅞           | 137  |
| 2½                    | 4½           | 115  | 4            | 102  | 5⅞           | 150  |
| 3                     | 4¾           | 121  | 4¾           | 121  | 6¾           | 172  |
| 4                     | 5⅞           | 137  | 5½           | 140  | 8¼           | 210  |

Table 22: MegaPress rings with V2/V3 actuator clearance requirements between pipe, wall, and floor

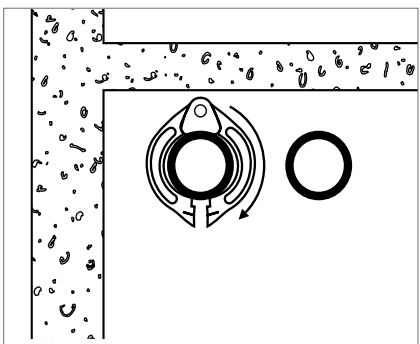
### 4.3.5 Pressing with Ring and Actuator in Tight Quarters



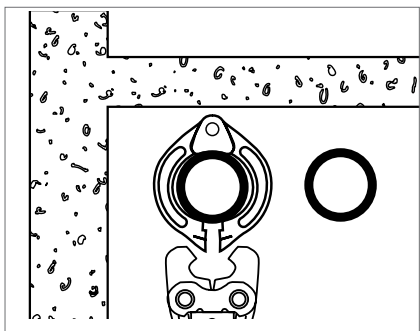
- Wrap the actuator ring around the press fitting with the opening facing away from you.



- Close the actuator ring tight around the fitting.



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



- Properly insert the press jaw and begin the press fitting procedure.

## 4.4 Welding

### 4.4.1 Welding Adjacent to a 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 4 inches away.

### 4.4.2 Welding in Line with a Fitting

To prevent damage to the sealing element, maintain proper welding distances from the fitting. If welding in line with the connection, weld a minimum of 3 feet away from the connection to protect the sealing element.

### 4.4.3 Welding Requirements

The installer should take precautions to keep the MegaPress 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 pipe has cooled before installing the press fitting.)
- Apply heat sink gel or spray or spot freezing.

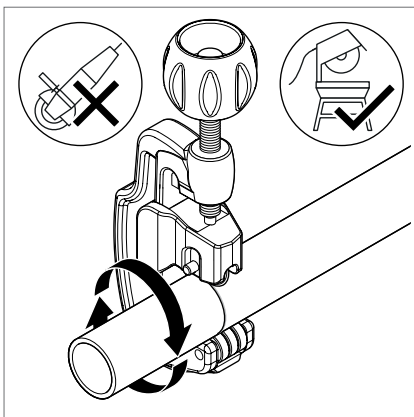
## 4.5 Cutting the Pipe



### Damaged pipe and/or sealing element

Press fittings can form improper connections as the result of damaged pipe and/or sealing elements. When cutting the pipe:

- Do not use flame cutters.
- Do not use grease or oils.



- Cut the pipe square. Do not deform the pipe when cutting.

**Note:** Cut pipe a minimum of 4 inches away from the contact area of the vise to prevent possible damage to the pipe in the press area.



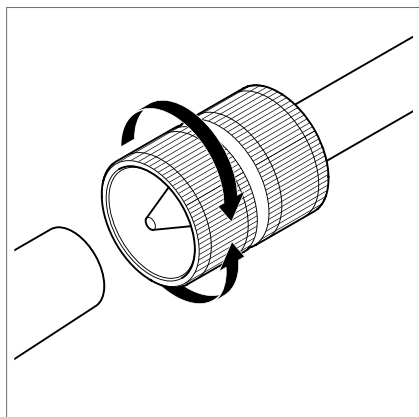
Avoid cutting through grooves, manufacturer's stamps, or engravings on the pipe's surface.

## 4.6 Deburring the Pipe



### Damage resulting from wrong deburring tool

- Connections may leak if they are damaged by improper deburring.
- Failure to deburr piping will reduce the service life of the system and can cause premature leaks.



The pipe ends must be thoroughly deburred after cutting. Deburring prevents damage to or twisting of the sealing element during installation.

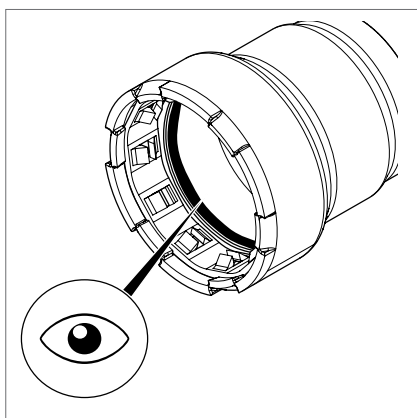
- Remove burr from inside and outside of piping and prep to proper insertion depth using a preparation tool or fine grit sandpaper.

## 4.7 Pressing the Fitting – Viega MegaPress ½" to 4"



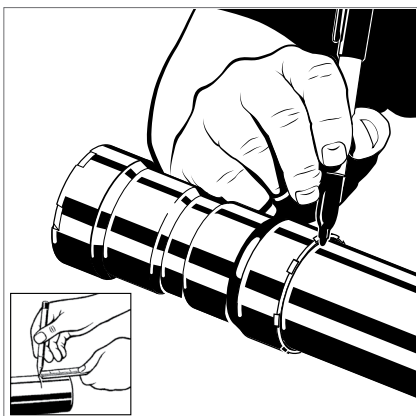
### WARNING!

**Read and understand all instructions for installing Viega MegaPress fittings.** Failure to follow all instructions may result in extensive property damage, serious injury, or death.



- Check the sealing element for correct fit:
  - The pipe end is not bent or damaged.
  - The pipe is deburred.
  - The correct sealing element is in the fitting.
  - The sealing element is undamaged.
  - The sealing element is completely in the bead.
- Check the separator ring for correct fit.
- Check the grip ring for correct fit.

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



- Measure insertion depth (see Table 23 below).
- Mark proper insertion depth on the outside of the pipe. It is recommended that the depth marking be visible on the completed assembly.

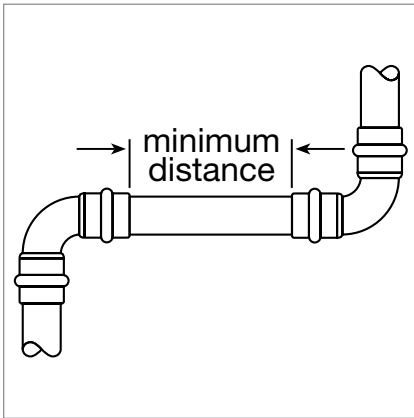


### Improper insertion depth

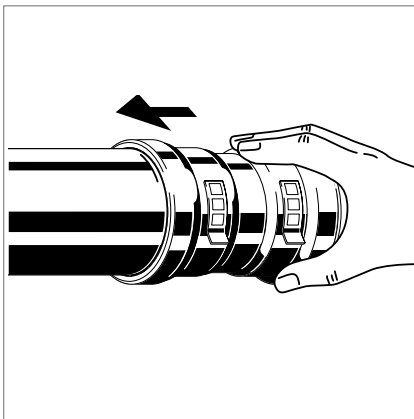
Improper insertion depth may result in an improper seal. Be sure to mark the correct insertion depth on the pipe before pressing the fitting.

| Pipe size<br>(in) | Minimum insertion depth |      |
|-------------------|-------------------------|------|
|                   | (in)                    | (mm) |
| ½                 | 1 ¼                     | 27   |
| ¾                 | 1 ⅜                     | 30   |
| 1                 | 1 ¾                     | 35   |
| 1 ¼               | 1 ⅞                     | 46   |
| 1 ½               | 2                       | 48   |
| 2                 | 2 ¼                     | 51   |
| 2 ½               | 2 ½                     | 64   |
| 3                 | 2 ¾                     | 70   |
| 4                 | 3 ¼                     | 86   |

Table 23: Minimum insertion depths for MegaPress ½" to 4" fittings



- Refer to [Table 15 for the minimum distance between fittings](#) to ensure a correct press. Failure to provide this distance may result in an improper seal.

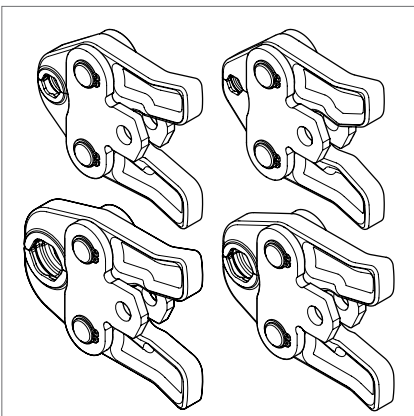


### WARNING!

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

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

## 4.7.1 Pressing ½"-1" Fittings



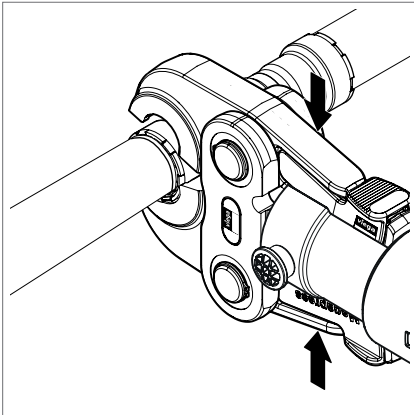
- Viega MegaPress ½" to 1" fitting connections must be performed with MegaPress jaws and rings.



### Use only MegaPress jaws and rings to press MegaPress fittings.

- See tool operator's manual for proper tool instructions.
- Use of incompatible jaws or rings will result in an improper connection. Do not use ProPress press jaws or rings.
- Do not mix actuators and rings from different manufacturers.



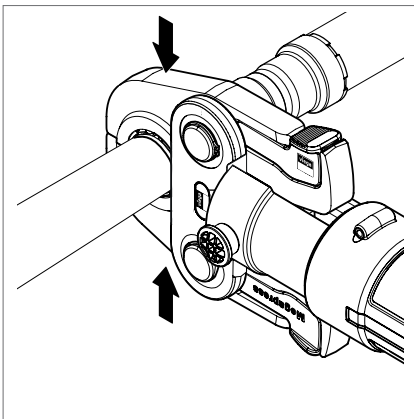


- Open the MegaPress jaw and place at right angles on the fitting.
- Visually check insertion depth using mark on piping.



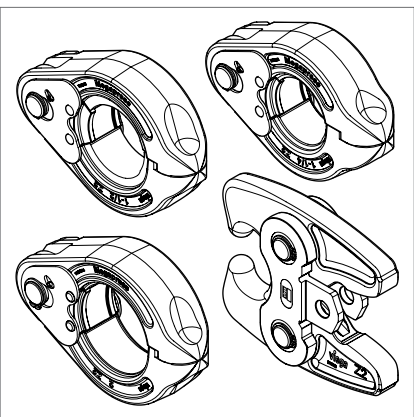
**Do not press over pipe threads.**

Install MegaPress fittings on plain end pipe only. Pressing fittings directly over threads will result in an improper seal.

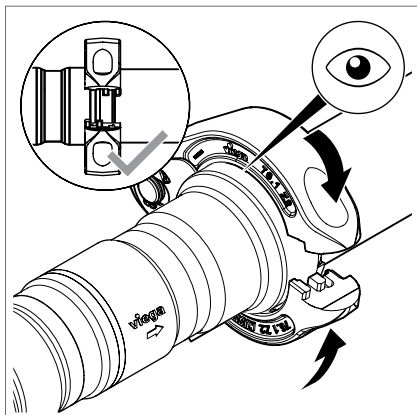


- Start the pressing process and hold the trigger until the jaw has engaged the fitting.
- Jaws will automatically release after a full press is made.
- Remove the MegaPress jaw from the fitting.

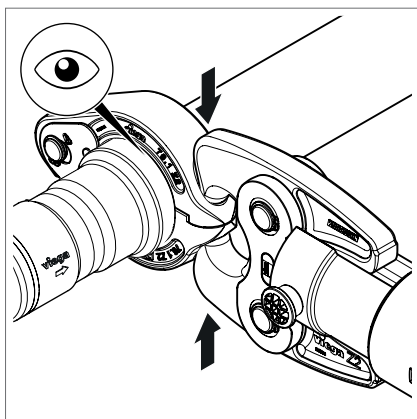
#### 4.7.2 Pressing 1¼"-2" Fittings



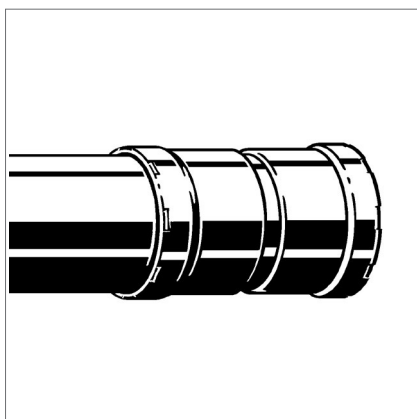
- Viega MegaPress 1¼" to 2" fitting connections must be performed with MegaPress rings and a V2 actuator.



- Open the MegaPress ring and place at right angles on the fitting.
- The MegaPress ring must be engaged on the fitting bead.
- Check insertion depth.

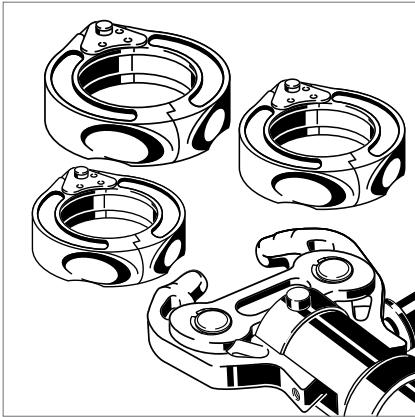


- Place V2 actuator onto the MegaPress ring and start the pressing process.
- Hold the trigger until the actuator has engaged the MegaPress ring.



- Once the press is complete, release the V2 actuator from the MegaPress ring.
- Remove the MegaPress ring from the fitting.

### 4.7.3 Pressing 2½"-4" Fittings

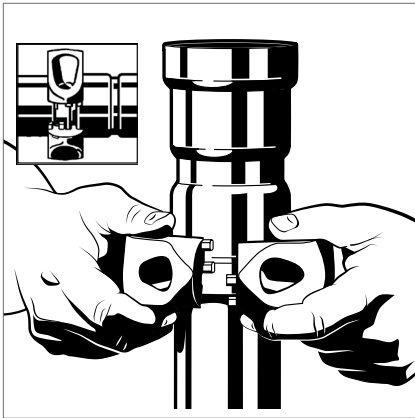


- Viega MegaPress 2½" to 4" fitting connections must be made using MegaPress XL rings and either the MegaPress XL PressBooster or the MegaPress Z3 actuator.



**Use only rings that are compatible with MegaPress 2½" to 4" fittings.**

- See tool operator's manual for proper tool instructions.
- Use of incompatible rings will result in an improper connection.
- Do not mix actuators and rings from different manufacturers.

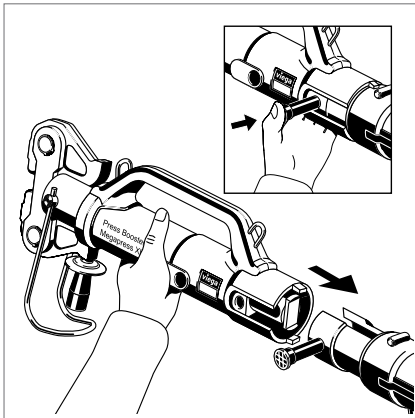


- Open MegaPress XL ring and place at right angles on the fitting.
- The MegaPress XL ring must be engaged on the fitting bead.
- Check insertion depth.

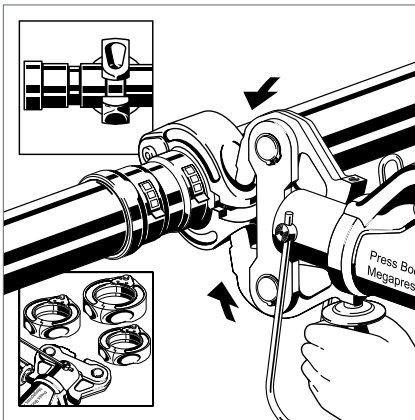
#### 4.7.4 Pressing With Viega MegaPress XL PressBooster

The PressBooster amplifies the mechanical force output. The PressBooster requires two presses of the press tool to execute a complete press for MegaPress 2½" to 4" fittings.

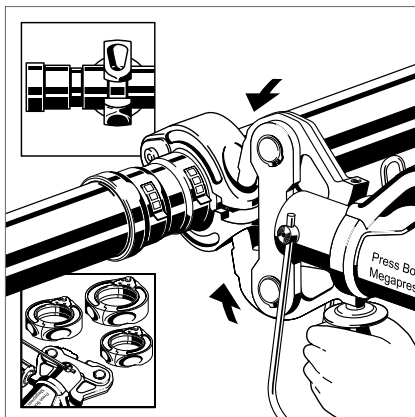
See the [MegaPress XL Press Booster Instructions for Use](#) for complete information on using the tool on the [Viega.us](http://Viega.us) website.



- Remove the retaining bolt from the press machine.
- Slide the PressBooster in via the press jaw fixture.
- Slide the retaining bolt of the press machine in as far as it will go.



- To open the PressBooster jaw, pull back the handle at the hinged adapter jaw.
- Place PressBooster onto the MegaPress XL ring by inserting the ball heads of the hinged adapter jaw into the contact points of the XL ring.
- Push the handle forward to close the hinged adapter jaw.

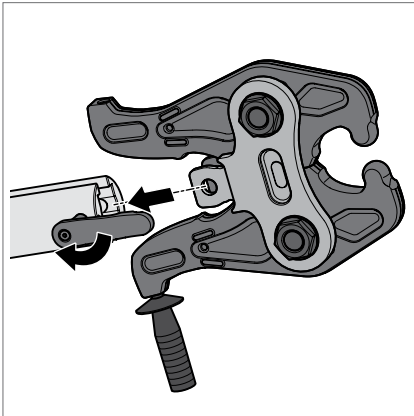


- Hold the trigger until the PressBooster has engaged the MegaPress XL ring.
- The PressBooster requires two presses of the trigger to execute a complete press. A third press may be needed to initiate a release cycle to reset the rollers back to the original position.
- Once the press is complete, release the PressBooster from the MegaPress XL ring.
- Remove the MegaPress XL ring from the fitting.

#### 4.7.5 Pressing With Viega MegaPress Z3 Actuator

The Z3 actuator amplifies the mechanical force output in order to execute a complete press for MegaPress 2½" to 4" fittings.

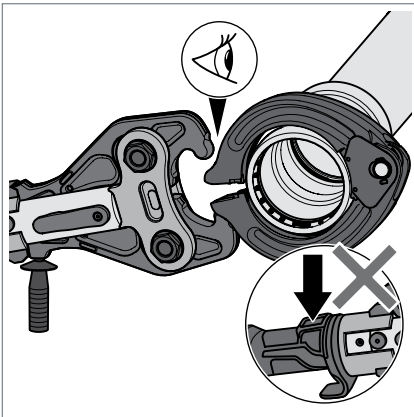
See the [MegaPress Z3 Actuator Instructions for Use](#) for complete information on using the tool on the [Viega.us](http://Viega.us) website.



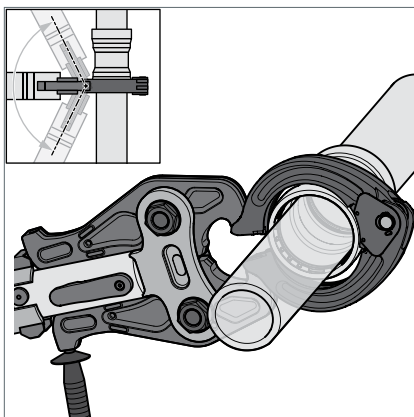
- On the press tool, rotate the retaining pin handle 180 degrees and pull it out to open the slot for the actuator.
- Insert the Viega Z3 actuator into the slot on the press tool.
- On the press tool, push the retaining pin back in and rotate it 180 degrees.



The handle of the actuator can be removed and attached to the opposite side of the actuator if necessary.



- Open the Viega Z3 actuator by pulling the handle back.
- Place the open Viega Z3 actuator onto the MegaPress XL ring by inserting the ball heads of the actuator into the contact points of the XL ring.
- Close the Z3 actuator.



- Start the pressing process by holding the press tool trigger until the actuator has engaged the XL ring.
- When the press cycle is complete, the actuator will stop and release.
- Once the Z3 actuator releases, remove it from the MegaPress XL ring.
- Remove the MegaPress XL ring from the fitting.

## 4.8 Pressure Testing

Viega Smart Connect technology provides a quick and easy way for installers to identify connections that need to be pressed. Unpressed connections are located by pressurizing the system with air or water.

Pressure test all installed pipes in accordance with local codes or, in the absence of local codes, in accordance with NFPA 54 or NFPA 58.



### Smart Connect Testing

- Testing for unpressed connections using Smart Connect is not a replacement for pressure testing requirements of local codes and standards.
- If testing with compressed air, use an approved leak-detect solution.

Water testing with Viega Smart Connect:

- Use a range of 15 to 85 psi.
- If an unpressed fitting is found, make sure the pipe is fully inserted before completing the press.
- If the initial test is successful, system may be pressure tested as required up to 600 psi.

Testing with air can be dangerous at high pressures. When air testing with Viega Smart Connect:

- Use a range of ½ psi to 45 psi.
- If an unpressed fitting is found, make sure the pipe is fully inserted before completing the press.
- If the initial test is successful, system may be pressure tested as required up to 200 psi.

Viega recommends air testing of gas systems at a minimum of ½ psi.

## 4.9 Disposal

Separate the product and packaging materials (e.g., paper, metal, plastic, nonferrous metals) and dispose in accordance with all national, state, and regional requirements.

## 5 Limited Warranty – Viega Metal Systems

Subject to the conditions and limitations in this Limited Warranty (“Warranty”), Viega LLC (“Viega”) warrants to end users, installers, and distributors in the United States and Canada that the following products (“Viega Products”) will be free of failure caused by a manufacturing defect from the date of installation for the time periods specified in the table included in this Warranty.

This Warranty will be valid only in the event the following conditions have been met: The Viega Products have been properly installed (1) under normal conditions of use; (2) under applications approved by Viega; (3) under Viega-specified system operating conditions; (4) using tools compatible with Viega systems; and (5) in alignment with Viega’s listings.

Further, you have a right to a remedy under this Warranty only if the Viega Product failure resulted from a manufacturing defect in the Viega Product and if the failure occurred during the applicable warranty period. You do not have a remedy under this Warranty if the failure was caused by (1) components other than those manufactured and/or sold by Viega; (2) failure to design, install, inspect, test, or maintain the Viega Product in accordance with Viega’s installation and product instructions in effect at the time of installation; (3) use of Viega Products under non-recommended system operating conditions (e.g., water pressures, temperatures, or other external chemical or physical conditions); (4) improper handling or protection of the Viega Product prior to, during, or after installation (e.g., inadequate freeze protection or exposure to environmental conditions not recommended for the application); or (5) acts of nature, including, without limitation, earthquakes, fire, or weather damage.

In the event of a failure of a Viega Product covered by this Warranty, it is the duty and responsibility of the end user to take appropriate measures to mitigate all potential damage, including making timely repairs to the system in which the Viega Product has been installed. The part or parts which you claim failed must be kept and returned to Viega for testing. Viega may be contacted at the phone number or mailing address below. All warranty claims must be made within 30 calendar days after the failure has (or should reasonably have) been discovered. You should be prepared to ship, at your expense, the Viega Product which you claim failed due to a manufacturing defect, with documentation of the installation date and the amount spent on any repair or replacement if performed by you. Within a reasonable time after receiving the Viega Product, Viega will investigate the cause of the failure, which includes the right to inspect the Viega Product at a Viega location and reasonable access to the site of any alleged damage. Viega will notify you in writing of the results of its review.

In the event Viega determines that the failure was the result of a manufacturing defect in the Viega Product covered by this Warranty and all conditions of this Warranty have been met, your **SOLE AND EXCLUSIVE REMEDY** under this Warranty shall be the reimbursement for the reasonable costs of repair or replacement of the Viega Product itself. **VIEGA SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL OR OTHER SIMILAR DAMAGES (E.G., ECONOMIC LOSS, WATER OR PROPERTY DAMAGE,**

OR MOLD REMEDIATION) UNDER ANY LEGAL THEORY AND WHETHER ASSERTED BY DIRECT ACTION, FOR CONTRIBUTION, INDEMNITY, OR OTHERWISE.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, OR IMPLIED, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE OR ANY STATUTE OF LIMITATIONS RELATING TO SUCH WARRANTIES. Viega will be responsible for remedies only if all conditions of this Warranty have been met. Other than this Warranty, Viega does not authorize any person, company, contractor, or distributor to create any additional warranty, obligation, or liability in connection with the Viega Product.

This 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.

| Warranty Period by Product and Application Type                                                                                                                                                                                                                                                      |                            |                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-------------------------------------------------|
| Viega Product Line                                                                                                                                                                                                                                                                                   | Residential and Commercial | Industrial <sup>1</sup> and Marine <sup>2</sup> |
| ProPress® copper fittings                                                                                                                                                                                                                                                                            | 50 years                   | 2 years                                         |
| ProPress 316 fittings and tubing                                                                                                                                                                                                                                                                     | 10 years                   |                                                 |
| MegaPress® fittings                                                                                                                                                                                                                                                                                  | 15 years                   |                                                 |
| MegaPress FKM fittings                                                                                                                                                                                                                                                                               |                            |                                                 |
| MegaPress 304 FKM fittings                                                                                                                                                                                                                                                                           |                            |                                                 |
| MegaPress 316 fittings                                                                                                                                                                                                                                                                               |                            |                                                 |
| MegaPress 316 FKM fittings                                                                                                                                                                                                                                                                           |                            |                                                 |
| MegaPressG <sup>3</sup> fittings                                                                                                                                                                                                                                                                     |                            |                                                 |
| MegaPress CuNi fittings                                                                                                                                                                                                                                                                              |                            |                                                 |
| All valves                                                                                                                                                                                                                                                                                           | 5 years                    |                                                 |
| <sup>1</sup> Industrial applications are defined as non-residential and non-commercial applications not normally accessible to the general public, including manufacturing, mining, process, or fabrication environments, or applications with components that have been cleaned for oxygen service. |                            |                                                 |
| <sup>2</sup> Marine applications are defined as mobile structures used to navigate water or stationary structures in water.                                                                                                                                                                          |                            |                                                 |
| <sup>3</sup> MegaPressG products covered by this Warranty must be installed by a licensed contractor in compliance with applicable building, permit, and inspection codes. See product instructions for additional information.                                                                      |                            |                                                 |

**> Viega LLC**  
585 Interlocken Blvd.  
Broomfield, CO 80021  
  
Phone (800) 976-9819  
www.viega.us

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