

Style 115 FireLock EZ™ Installation-Ready™ Reducing Coupling



⚠ WARNING



- Read and understand all instructions before attempting to install any Victaulic products.
- Always depressurize and drain the piping system completely before attempting to install, remove, adjust, or maintain any Victaulic products.
- Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- Wear safety glasses, hardhat, and foot protection.

Failure to follow these instructions could result in death or serious personal injury and property damage.

IMPORTANT INFORMATION

IGS Groove Profile for 1-inch/DN25 Side of Coupling



Original Groove System (OGS) Groove Profile for 1¼-inch/DN32 or 1½-inch/DN40 Side of Coupling



Pipe and grooves are not shown to scale

The 1-inch/DN25 side of Style 115 Couplings shall be used **ONLY** with mating components that are prepared to Victaulic IGS proprietary groove specifications. Refer to Victaulic publication 25.14 for the IGS groove specification, which can be downloaded at victaulic.com.

The 1¼-inch/DN32 or 1½-inch/DN40 side of Style 115 Couplings shall be used **ONLY** with mating components that are prepared to Victaulic Original Groove System (OGS) groove specifications. Refer to Victaulic publication 25.01 for the OGS groove specification, which can be downloaded at victaulic.com.

The 1-inch/DN25 mating component's outside diameter ("OD"), groove dimensions, and maximum allowable flare diameter shall be within the tolerances published in current Victaulic IGS specifications, publication 25.14, which can be downloaded at victaulic.com.

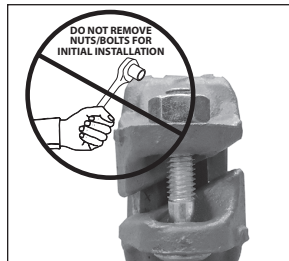
The 1¼-inch/DN32 or 1½-inch/DN40 mating component's outside diameter ("OD"), groove dimensions, and maximum allowable flare diameter shall be within the tolerances published in current Victaulic OGS specifications, publication 25.01, which can be downloaded at victaulic.com.

NOTICE



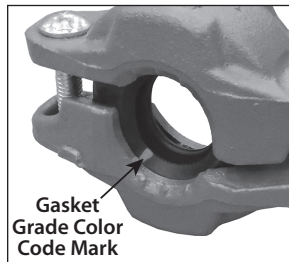
- When stainless steel hardware is special ordered, the bolt head will contain a "316" mark, as shown to the left.

INSTRUCTIONS FOR THE INITIAL INSTALLATION OF STYLE 115 COUPLINGS

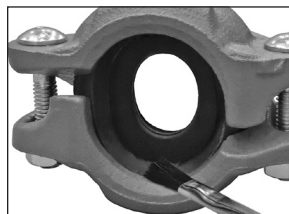


1. DO NOT DISASSEMBLE THE COUPLING: Style 115 FireLock EZ™ Installation-Ready™ Reducing Couplings are designed so that the installer does not need to remove the bolts and nuts for installation. This facilitates installation by allowing the installer to directly insert the grooved end of mating components into the coupling.

2. CHECK MATING COMPONENT ENDS: The outside surface of the mating components, between the groove and the mating component ends, shall be smooth and free from indentations, projections, weld seam anomalies, and roll marks to ensure a leak-tight seal. All oil, grease, loose paint, dirt, and cutting particles shall be removed. Always verify that the correct groove profile is being used.



3. CHECK GASKET: Check the gasket to verify that it is suitable for the intended service. The color code identifies the material grade. Refer to Victaulic publication 05.01 for the color code chart, which can be downloaded at victaulic.com. **REFER TO THE NOTICE ON THE FOLLOWING PAGE FOR IMPORTANT GASKET INFORMATION.**



3a. IF ANY CONDITIONS LISTED IN THE NOTICE ARE MET, APPLY A THIN COAT OF A COMPATIBLE LUBRICANT, SUCH AS VICTAULIC LUBRICANT OR SILICONE LUBRICANT, ONLY TO THE GASKET SEALING LIPS.

⚠ CAUTION

- If any conditions listed in the notice are met, a thin coat of a compatible lubricant shall be applied only to the gasket sealing lips to prevent pinching, rolling, or tearing during installation.

Failure to use a compatible lubricant may cause gasket damage, resulting in joint leakage and property damage.

NOTICE

- Gaskets for Style 115 Couplings are provided with *Vic-Plus*. Additional lubrication is not required for the initial installation of wet pipe systems that are installed at or continuously operating above 0°F/-18°C. Refer to Victaulic publication 05.03 for the *Vic-Plus* Safety Data Sheet (SDS), which can be downloaded at victaulic.com.

Supplemental lubrication is required only if any of the following conditions exist. Apply a thin coat of a compatible lubricant to the gasket sealing lips, as noted in step 3a on this page. It is not necessary to remove the gasket from the housings to apply additional lubricant to the exterior surface.

- If the installation or continuous operating temperature is below 0°F/-18°C
- If the gasket has been exposed to fluids prior to installation
- If the surface of the gasket does not have a hazy appearance
- If the gasket is being installed into a dry pipe system
- If the system will be subjected to air tests prior to being filled with water
- If the gasket was involved in a previous installation
- If the gasket sealing surfaces of the mating components contain raised or undercut weld seams, or cracks or voids at the weld seams

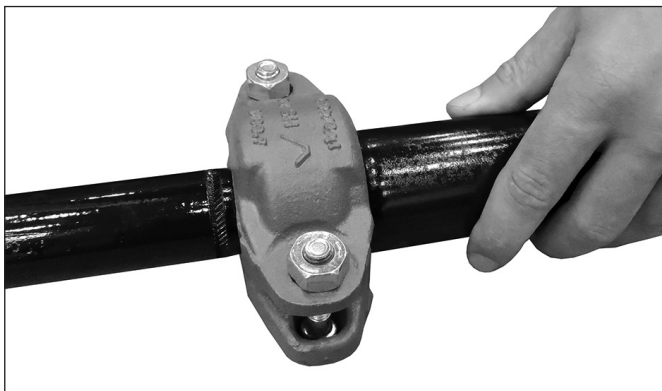
Lubricated gaskets will not enhance sealing capabilities on adverse mating component conditions. Mating component condition and preparation shall conform to the requirements listed in these product installation instructions.

WARNING



- Never leave a Style 115 Coupling partially assembled on mating component ends. **ALWAYS TIGHTEN THE HARDWARE IMMEDIATELY.** A partially assembled coupling poses a drop or fall hazard during installation and a burst hazard during testing.
- Keep hands away from the mating component ends and the openings of the coupling when attempting to insert grooved mating component ends into the coupling.
- Keep hands away from coupling openings during tightening.

Failure to follow these instructions could result in death or serious personal injury and property damage.



4. ASSEMBLE JOINT: Assemble the joint by inserting a mating component into the corresponding size opening of the coupling. The grooved mating component ends shall be inserted into the coupling until contact with the center leg of the gasket occurs.

A visual check is required to verify that the coupling keys align with the groove in each mating component and that the gasket is seated properly. **NOTE:** The coupling may be rotated to verify that the gasket is seated properly on the pipe ends and within the coupling housings.

NOTES FOR USE WITH END CAPS AND FITTINGS:

For the 1 ¼-inch/DN32 or 1 ½-inch/DN40 side, use only FireLock No. 006 End Caps containing the “EZ” marking on the inside face or No. 60 End Caps containing the “EZ QV” marking on the inside face. Take additional care to verify that the end cap is seated fully against the center leg of the gasket.

For the 1-inch/DN25 IGS side, the FireLock No. 146 End Cap shall not be used directly with the Style 115 Coupling. In this case, a spool piece with both ends prepared to 1-inch/DN25 IGS dimensions and a Style 108 Coupling are required between the Style 115 Coupling and No. 146 End Cap.

Always read and follow the I-ENDCAP instructions, which can be downloaded at victaulic.com.

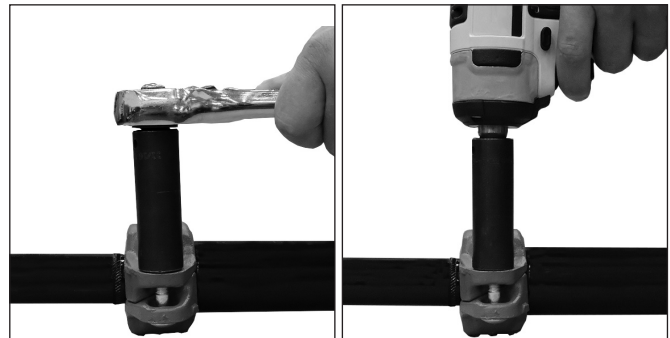
Victaulic recommends the use of Victaulic fittings with this coupling.

WARNING

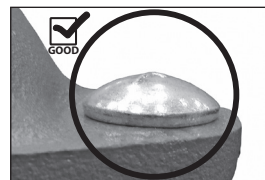
- Nuts shall be tightened evenly by alternating sides until metal-to-metal contact occurs at the angled bolt pads.
- Equal and positive or neutral offsets shall be present at the angled bolt pads.

Failure to follow instructions for tightening coupling hardware could result in:

- Personal injury or death
- Bolt damage or fracture
- Damaged or broken bolt pads or coupling fractures
- Joint leakage



5. TIGHTEN NUTS: Using an impact wrench or a standard socket wrench with an 1 ¼-inch/17-mm deep well socket, tighten the nuts evenly by alternating sides until metal-to-metal contact occurs at the angled bolt pads. Verify that the oval neck of each bolt seats properly in the bolt hole and that equal and positive or neutral offsets are present at the bolt pads. **DO NOT** continue to tighten the nuts after metal-to-metal bolt pad contact is achieved. **If you suspect that any hardware has been over-tightened (as indicated by a bend or crack in the bolts, etc.), the coupling assembly shall be replaced immediately.** Refer to the “Impact Wrench Usage Guidelines” section.



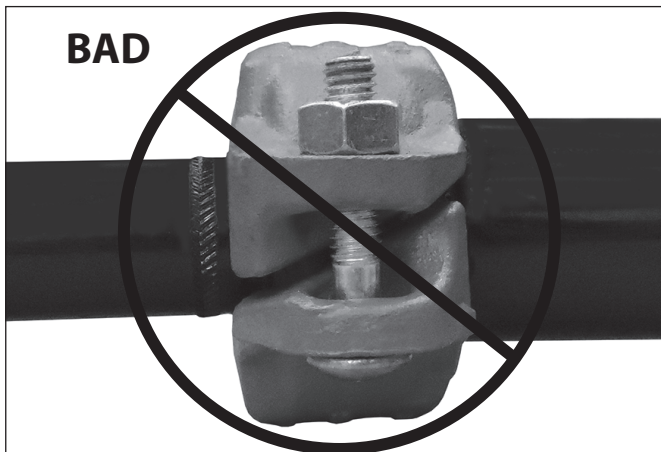
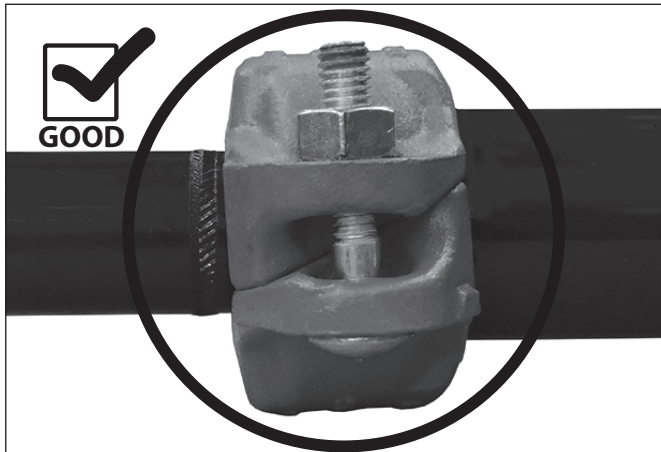
OVAL NECK OF BOLT SEATED PROPERLY



OVAL NECK OF BOLT NOT SEATED PROPERLY

NOTICE

- It is important to tighten the nuts evenly by alternating sides to prevent gasket pinching.
- An impact wrench or standard socket wrench with a deep-well socket can be used to bring the bolt pads into metal-to-metal contact.
- Refer to the “Impact Wrench Usage Guidelines” section.



6. Visually inspect the bolt pads at each joint to verify that metal-to-metal contact is achieved across the entire bolt pad section. Equal and positive or neutral offsets shall be present at each bolt pad, in accordance with step 5.

⚠ WARNING

- Visual inspection of each joint is required.
- Improperly assembled joints shall be corrected before the system is tested or placed into service.
- Any components that exhibit physical damage due to improper assembly shall be replaced.

Failure to follow these instructions could cause joint failure, resulting in death or serious personal injury and property damage.

✔ GOOD		⊘ BAD	
PROPERLY ASSEMBLED JOINT POSITIVE OFFSET WITH BOLT PAD CONTACT	PROPERLY ASSEMBLED JOINT NEUTRAL OFFSET WITH BOLT PAD CONTACT	IMPROPERLY ASSEMBLED JOINT NEGATIVE OFFSET	IMPROPERLY ASSEMBLED JOINT BOLT PAD GAP

- “Negative” bolt pad offsets can occur when the nuts are not tightened evenly, which produces over-tightening of one side and under-tightening of the other side. In addition, “negative” offsets can occur if both nuts are under-tightened.

INSTRUCTIONS FOR REASSEMBLY OF STYLE 115 COUPLINGS

⚠ WARNING

- Always depressurize and drain the piping system completely before attempting to install, remove, adjust, or maintain any Victaulic products.
- Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.

Failure to follow this instruction could result in death or serious personal injury and property damage.

1. Verify that the system is depressurized and drained completely before attempting to disassemble any couplings.
2. Loosen the nuts of the coupling assembly to permit removal of the coupling from the mating component ends.
3. Remove the nuts, bolts, and gasket from the housings. Inspect all components for any damage or wear. If any damage or wear is present, use a new Victaulic-supplied coupling assembly.
4. Check mating component ends, as described in step 2 on page 1.

⚠ CAUTION

- A thin coat of a compatible lubricant shall be used to prevent the gasket from pinching, rolling, or tearing during reassembly.

Failure to use a compatible lubricant will cause gasket damage, resulting in joint leakage and property damage.



5. FOR REASSEMBLY OF STYLE 115 COUPLINGS, LUBRICATE GASKET: Apply a thin coat of a compatible lubricant, such as Victaulic Lubricant or silicone lubricant, to the surfaces of the gasket shown above. For gaskets that are being reused, it is normal for the gasket surface to have a hazy white appearance after it has been in service.

NOTICE

Two methods can be followed for reassembly of Style 115 Couplings.

- **METHOD 1 FOR REASSEMBLY:** The coupling can be reassembled into its “installation-ready” condition by installing the gasket into the housings, then inserting the bolts and threading a nut onto each bolt until 2 – 3 threads are exposed, as shown above. Verify that the smaller opening of the gasket is facing toward the smaller opening of the housings. If this method is chosen, steps 1 – 5 above, along with all steps on page 2, shall be followed.

OR

- **METHOD 2 FOR REASSEMBLY:** The gasket and housings can be assembled onto the mating component ends by following steps 1 – 5 above, along with all steps in the “Method 2 for Reassembly” section.

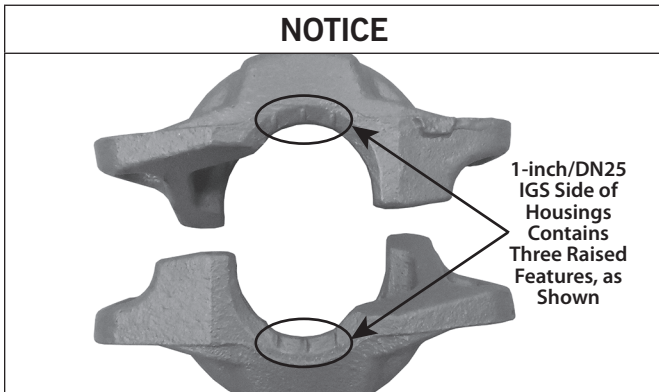
Style 115 FireLock EZ™ Installation-Ready™ Reducing Coupling

METHOD 2 FOR REASSEMBLY

1. Verify that steps 1 – 5 in the “Instructions for Reassembly of Style 115 Couplings” section have been followed.



2. **JOIN MATING COMPONENTS:** Align the centerlines of the two grooved mating component ends. Insert the smaller mating component end into the smaller opening of the gasket and the larger mating component end into the larger opening of the gasket until contact with the center leg occurs. **NOTE:** Verify that no portion of the gasket extends into the groove of either mating component.



• **Match the correct size opening of each housing before attempting to install the housings (refer to the size markings on top of each housing). In addition, the 1-inch/DN25 IGS side of the housings contains three raised features.**



3. **INSTALL HOUSINGS:** Install the housings over the gasket. Verify that the housings’ keys engage the grooves completely on both mating components and that each side of the housing is facing the corresponding mating component side.



4. **INSTALL BOLTS/NUTS:** Install the bolts and thread a nut finger-tight onto each bolt. **NOTE:** Verify that the oval neck of each bolt seats properly in the bolt hole.

5. **TIGHTEN NUTS:** Follow steps 5 – 6 on pages 2 – 3 to complete the assembly.

IMPACT WRENCH USAGE GUIDELINES

⚠ WARNING

- Nuts shall be tightened evenly by alternating sides until metal-to-metal contact occurs at the angled bolt pads.
- Equal and positive or neutral offsets shall be present at the angled bolt pads.
- **DO NOT** continue to tighten the nuts after the visual installation guidelines for the coupling, described in steps 5 – 6 on pages 2 – 3, are achieved.

Failure to follow these instructions could cause joint failure, resulting in death or serious personal injury and property damage.

Impact wrenches do not provide the installer with direct “wrench feel” or torque to judge nut tightness. Since some impact wrenches are capable of high output, it is important to develop a familiarity with the impact wrench to avoid damaging or fracturing the bolts or the bolt pads during installation. Always choose the right size impact wrench that has enough power, but **DO NOT** continue to tighten the nuts after the visual installation guidelines for the coupling, described in steps 5 – 6 on pages 2 – 3, are achieved. If you suspect that any hardware has been over-tightened (as indicated by a bend or crack in the bolt, etc.), the coupling shall be replaced immediately.

If the battery is drained or if the impact wrench is under-powered, a new battery pack or new impact wrench shall be used to ensure that the visual installation guidelines for the coupling, described in steps 5 – 6 on pages 2 – 3, are achieved. **Visual inspection of each joint is required for verification of proper assembly.**

Perform trial assemblies with the impact wrench and check the assemblies with a torque wrench to help determine the suitability of the impact wrench. Using the same method, periodically check assemblies throughout the system installation.

For safe and proper use of impact wrenches, always refer to the impact wrench manufacturer’s operating instructions. In addition, verify that proper impact grade sockets are being used for coupling installation.

⚠ WARNING

Failure to follow instructions for tightening hardware could result in:

- Personal injury or death
- Bolt damage or fracture
- Damaged or broken bolt pads or fractures to housings
- Joint leakage and property damage