

## Style 89 Rigid Coupling Style 889 Rigid Coupling for Potable Water Applications

IT-89/889

THIS COUPLING ASSEMBLY HAS A TORQUE REQUIREMENT. REFER TO THE BACK OF THIS TAG OR THE MARKINGS ON THE HOUSINGS FOR THE SPECIFIC TORQUE REQUIREMENT. ALWAYS REFER TO THE I-100 FIELD INSTALLATION HANDBOOK FOR ADDITIONAL INFORMATION.

### WARNING



- Read and understand all instructions before attempting to install 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.
- Confirm that any equipment, branch lines, or sections of piping that may have been isolated for/ during testing or due to valve closures/positioning are identified, depressurized, and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.
- Wear safety glasses, hardhat, and foot protection.
- Style 89/889 Couplings shall be installed only on stainless steel mating components that are prepared to Victaulic Original Groove System (OGS) Specifications.
- Refer to Victaulic publication 17.01 for stainless steel pipe preparation methods, which can be downloaded at victaulic.com.
- Victaulic RX grooving rolls shall be used for stainless steel pipe that is designated in Table 1 in Victaulic publication 17.01. Victaulic RX grooving rolls are silver in color and are identified by the "RX" marking on the face.

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



**1. CHECK MATING COMPONENT ENDS:** The outside surface of the mating components, between the groove and the mating component ends, shall be generally 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. **The mating components' outside diameter ("OD"), groove dimensions, and maximum allowable flare diameter shall be within the tolerances published in current Victaulic Original Groove System (OGS) specifications, publication 25.01, which can be downloaded at victaulic.com.**



**2a. CHECK GASKET:** Check the gasket to verify that it is suitable for the intended service. The color code identifies the material grade. **For complete compatibility information, reference Victaulic publications 05.01 and GSG-100, which can be downloaded at victaulic.com.**

**2b. LUBRICATE GASKET:** Apply a thin coat of a compatible lubricant, such as Victaulic Lubricant or silicone grease, to the gasket sealing lips and exterior. **NOTE:** Silicone spray is not a compatible lubricant.

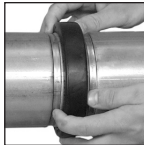
### CAUTION

- A thin coat of a compatible lubricant shall be applied to the gasket sealing lips and exterior to help prevent the gasket from pinching, rolling, or tearing during installation.
- **DO NOT** use excessive lubricant on the gasket sealing lips and exterior.

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



**3. INSTALL GASKET:** Install the gasket over the mating component end. Verify that the gasket does not overhang the mating component end.

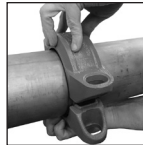


**4. JOIN MATING COMPONENTS:** Align the centerlines of the two grooved mating component ends. Slide the gasket into position and center it between the groove of each mating component. Verify that no portion of the gasket extends into the groove of either mating component.

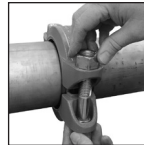
### CAUTION

- Verify that the gasket does not become rolled or pinched while installing the housings.

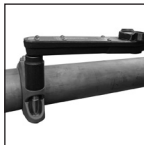
Failure to follow this instruction may cause gasket damage, resulting in joint leakage and property damage.



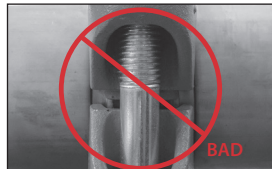
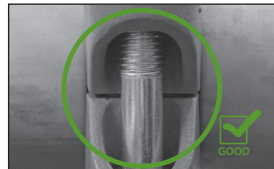
**5. INSTALL HOUSINGS:** Install the housings over the gasket with the tongue-and-recess features mated properly (tongue in recess). Verify that the housings' keys engage the grooves completely on both mating components.



**6. 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. If couplings are special-ordered with stainless steel bolts and nuts, an anti-seize compound shall be applied to the bolt threads.

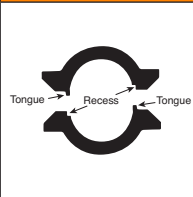


**7. TIGHTEN NUTS:** Using an impact tool or a standard socket wrench with a deep-well socket, tighten the nuts evenly by alternating sides until the gaps are equal at the bolt pads. Verify that the oval neck of each bolt seats properly in the bolt holes. **To complete the assembly, apply torque to each nut with a torque wrench.** Refer to the "Assembly Torque Requirements and Helpful Information" table to the right.



**8. Inspect the bolt pads at each joint to verify that even gaps are achieved at the bolt pads AND the required torque value is achieved at each set of hardware.**

### WARNING



- The housings' tongue and recess features shall be mated properly (tongue in recess).
- Nuts shall be tightened evenly by alternating sides, maintaining nearly uniform bolt pad gaps, until all assembly requirements specified in steps 7 and 8 are achieved.

Failure to tighten nuts as instructed will cause increased loading of the hardware, resulting in the conditions listed in the following column:

- Excessive bolt torque required to assemble the joint (incomplete assembly)
  - Damage to the assembled joint (damaged or broken bolt pads or fractures to housings)
  - Bolt damage or fracture
  - Joint leakage and property damage
  - A negative impact on system integrity
  - Personal injury or death
- DO NOT continue to tighten the nuts after the assembly requirements specified in steps 7 and 8 are achieved.
- Failure to follow this instruction could result in the conditions listed above.

### Assembly Torque Requirements and Helpful Information

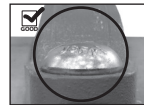
Nominal inches/DN	Actual Outside Diameter inches/mm	Required Torque ft-lbs/ N•m	Nut Size inches/Metric	Socket Size inches/mm
2 - 3 DN50 - DN80	2.375 - 3.500 60.3 - 88.9	60 - 90 81 - 122	5/8 M16	1 1/16 27
DN65*	3.000 76.1	60 - 90 81 - 122	5/8 M16	1 1/16 27
4 DN100	4.500 114.3	85 - 125 115 - 170	3/4 M20	1 1/4 32
DN125*	5.500 139.7	85 - 125 115 - 170	3/4 M20	1 1/4 32
5*	5.563 141.3	85 - 125 115 - 170	3/4 M20	1 1/4 32
*	6.500 165.1	175 - 250 237 - 339	7/8 M22	1 7/16 36
6 DN150	6.625 168.3	175 - 250 237 - 339	7/8 M22	1 7/16 36
*	8.515 216.3	200 - 300 271 - 407	1 M24	1 5/8 41
8 DN200	8.625 219.1	500 678	1 M24	1 5/8 41
*	10.528 - 12.539 267.4 - 318.5	250 - 350 339 - 475	1 M24	1 5/8 41
10 - 12	10.750 - 12.750 273.0 - 323.9	500 678	1 M24	1 5/8 41

\* Style 89 only

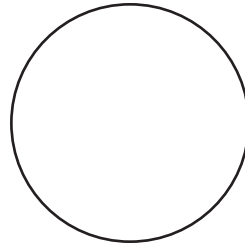
### WARNING

- 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 before the system is tested or placed into service.

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



OVAL NECK OF BOLT SEATED PROPERLY



OVAL NECK OF BOLT NOT SEATED PROPERLY

For complete contact information, visit [victaulic.com](http://victaulic.com)

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