



Procedure 2308: Connecting Vent-Lock™ Safety Cam and Groove Couplings

effective 1/16

Preparation

- 1. Prepare the hose using Procedure 1100: General Preparation Instructions (pages 9-10).

Notes

- 1. The Vent-Lock™ system prevents the accidental uncoupling of the fitting while under pressure. If the cam arms are accidentally opened while the assembly is still under pressure, the pressure will be released but the coupling will stay attached (see note on 9 below).
- 2. Blocking tabs prevent the cam arms from closing until the coupling is rotated to the safety position.
- 3. The Vent-Lock™ system is intended to protect you from an accidental uncoupling of the fittings while under pressure. Always remove the pressure from your system before attempting to uncouple the fitting. If you uncouple the fitting and find it difficult to rotate for removal, stop and verify that the pressure has been removed.
- 4. Residual pressure left in an assembly or induced by temperature changes can still cause injuries. When the Vent-Lock™ fitting is un-coupled, residual pressure and product will vent through the coupling. Always wear personal protective equipment appropriate for the product in use. 
- 5. Does not interchange with standard cam and groove products; use only with Vent-Lock™ L-style fittings! 
- 6. Rated up to **250 PSI** at ambient temperature (**70°F**) with standard Buna-N seal installed. For use at elevated temperatures or other unusual operating conditions, consult Dixon®.
- 7. 1", 1½" and 2" sizes have a maximum working pressure of **250 PSI**.
- 8. 3" maximum working pressure **150 PSI** with King Crimp™ ferrules; **125 PSI** with King Crimp™ Sleeves.
- 9. The 1" size does not vent above **140 PSI**. You will need to manually release the pressure from the assembly safely from another valve.

Process

To connect:

- 1. Open the arms on the coupler.
- 2. Align the arms with the machined grooves in the adapter.
- 3. Insert the adapter into the coupler.
- 4. Rotate the adapter 90°.
- 5. Close both arms at the same time.

To disconnect:

- 1. Confirm the pressure is released from the assembly.
- 2. Open one handle at a time.
- 3. Rotate the adapter 90° to align the cam arms with the machined grooves in the adapter.
- 4. Remove the adapter.

If the cam arms are accidentally opened on a pressurized assembly:

- 1. Locate and shut off the supply valve to the assembly.
- 2. After the pressure is vented from the assembly, rotate the coupler 90° to align the arms with the machined grooves in the adapter.
- 3. Disconnect the assembly.

Inspect the couplings for damage using Procedure 3003: Inspecting Dixon® Cam and Groove Couplings (pages 52-53).