INSTALLATION GUIDE

T-2605NL & T-2606NL DRAINABLE

NO-LEAD BRASS BALL VALVE WITH CPVC END CONNECTIONS (1/2", 3/4" and 1")

WARNINGS

Read this installation manual **BEFORE** installing this product and follow all written instructions. Noncompliance with safety protocols and usage information may result in serious personal injury, property damage, and voiding of the product warranty. Keep this IOM for future reference.

APPLICATIONS

The T-2605NL & T-2606NL (Drainable) Series Brass Ball Valve with CPVC Solvent Weld End Connections are designed for reliable shut-off and flow control in CPVC water distribution systems. These valves feature a lead-free forged brass body, chrome-plated brass ball, PTFE seats, EPDM seals and a blowout-proof stem for durable quarter-turn operation, making them suitable for both residential and commercial plumbing applications. The integrated CPVC socket ends allow for direct solvent welding to CPVC piping without the need for additional transition fittings, simplifying installation and reducing leak points. With a full-port design and 400 PSI CWP rating, this valve ensures minimal pressure drop and robust performance. Certified to applicable plumbing standards, it meets quality and safety requirements for potable water service.

PRODUCT SPECIFICATIONS

These valves are constructed from lead-free brass (DZR compliant) with CPVC solvent-weld end connections, suitable for potable hot and cold water or compatible non-hazardous liquid services. The design incorporates quarter-turn operation, full-port flow, blowout-proof stems, and EPDM/PTFE sealing components for reliable service.

Product Specifications

- Sizes: 1/2", 3/4", 1"
- End Type: CPVC Socket, ASTM D2846 / F438, SDR11 - CTS Size
- Pressure Rating: 150 PSI @ 73°F (de-rated with temperature)
- Temperature Range: 34°F - 180°F (1°C - 82°C)
- Service: Water and Compatible Liquids Only (Non-Compressible)
- Flow type: Full Port, 1/4-Turn
- Certification: NSF 61, NSF 372

Technical Specifications

- Working Pressure: 150 PSI @ 73°F
- Max. Temperature: 180°F (82°C)
- Min. Temperature: 34°F (1°C)
- Service: Water and Compatible Liquids only

INSTALLATION CONSIDERATIONS

READ AND FOLLOW ALL WARNINGS BEFORE INSTALLATION

Failure to follow these instructions may result in product damage or personal injury.

- Use in liquid service only.
- Never use compressed air, gas, or steam.
- Always depressurize and drain the system before removing or servicing the valve.
- Protect CPVC ends from heat; do not expose CPVC inserts to temperatures above 180°F (82°C).
- Wear chemical-resistant gloves and eye protection when handling primer and solvent cement.
- Do not use pipe dopes or thread sealants on solvent-weld CPVC joints.

INSTALLATION INSTRUCTIONS

Follow ASTM D2846 or F438 and manufacturer instructions. Keep valves in original packaging. Store indoors, away from sunlight and extreme temperature.

1. Cut pipe square, then deburr and chamfer (10–15°) the OD slightly to ease insertion.
2. Dry fit to mark the insertion depth (or refer to table below). Clean surfaces with a dry cloth.
3. Apply the primer according to cement manufacturer instructions then apply solvent cement to both pipe OD and socket ID. Insert the ball valve, turn it 90 degrees and hold 15–30 seconds, to prevent push-out. Wipe excess cement.
4. Allow the appropriate set and cure time before handling or pressure testing. Cure times depend on cement used, pipe size, temperature and humidity — reference manufacturer cure charts. Typical minimum cure times for 1/2"–1" joints are 30–120 minutes, with 2 hours commonly recommended before testing at 70°F. Full cure may require 24 hours for some cements or cooler conditions.
5. Support the surrounding piping so the valve does not carry pipe weight.

Insertion Depth Chart			
Tube Size	1/2"	3/4"	1"
Insertion Depth	0.5" (12.8 mm)	0.6875" (17.42 mm)	0.875" (22.22 mm)

Typical Minimum Handling Times (70°F, Low Humidity)				
Pipe Size	**Initial Set**	**Safe to Handle**	**Pressure Test**	**Full Cure**
1/2" - 1"	15-30 minutes	1-2 hours	After 2 hours	Up to 24 hours*

*Full cure may require 24 hours for some cements or cooler conditions

Adverse Conditions	
Condition	**Adjustment**
Cooler temperature / higher humidity	Allow 50% or more additional cure time

Start-Up & Operation

- Verify solvent-cement cure time has elapsed per manufacturer's guidance before pressurizing.
- Place valve handle at 45° (half-open) and slowly fill the line to purge air.
- Inspect all joints and stems for leaks. Tighten packing nuts slightly if minor seepage is observed.
- Operate valve through full travel to confirm smooth action.
- Rotate handle counterclockwise to open, clockwise to close.
- Do not use wrenches or apply excessive torque.
- Cycle valves every 6 months.

Pressure Testing

- Test only with water after full cure.
- Never use compressed air or gas.
- Do not exceed rated pressure.
- Cut out and reinstall if leaks occur.

MAINTENANCE & TROUBLESHOOTING

Maintenance

Routine and preventive maintenance keep valves serviceable and extends life.

- Visual inspection: Every 3 months check for leaks, handle integrity, external corrosion, and mounting support.
- Operate: Every 6 months cycle from open to closed and back to keep seats from sticking.
- Make sure all safety and control valves are functioning correctly and that the entire system is leak-free.

Troubleshooting

Leak at CPVC joint

- Cause: Incomplete solvent cement coverage or insufficient cure.
- Action: Cut out and reinstall the valve using correct primer/cement and allow for proper cure time.

Valve hard to operate

- Cause: Debris in seats or oversized torque.
- Action: Flush system, remove and inspect seats, and replace if required.

Water hammer or vibration

- Cause: High flow velocity or rapid closure.
- Action: Reduce velocity to <8 ft/s and add restraint if needed.

NOTICE

Failure to follow these installation instructions may void the product warranty and could result in serious property damage and/or bodily injury, including death.

WARNING

This product can expose you to chemicals which are known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov