



# Uponor

## RADIANT HEATING SYSTEMS

### 2" COPPER VALVED MANIFOLD

#### TECHNICAL BULLETIN

#### Introduction

Uponor's 2" Copper Valved Manifolds are 4 feet (48 inches) long with 12 valved outlets. The outlets come in several configurations of ProPEX® or male threaded connections and feature either a ball valve (isolation) or a ball and balancing valve combination (isolation with balancing). Refer to the Uponor Product Catalog for detailed information about the options available with these manifolds.

#### Balancing

When balancing a manifold, leave the longest loop on the manifold fully open. (From closed to fully open is 10 full turns.) Then, balance the remaining loops using the following balancing formula.

#### Balancing Formula

1. Divide the loop to be balanced by the longest loop on the manifold.
2. Take that number and multiply it by 10.
3. This equals the number of turns to make from the closed position.

#### Example

The loop to be balanced is 250 feet. The longest loop on the manifold is 300 feet.

$$250 \text{ divided by } 300 = 0.83$$

$$0.83 \times 10 = 8.3$$

Open the memory spindle for the 250-foot loop 8.3 turns from the closed position.

Refer to the following instructions for proper manifold balancing.

1. Remove the knurled safety cap from the valve.
2. Using an Allen or hex key, turn the memory spindle clockwise until closed.
3. To balance, turn the key counterclockwise the proper

number of required turns from the closed position.

4. Replace the safety cap.

#### Applicable Tubing

The 2" Copper Valved Manifolds support the following tubing.

- 5/8" and 3/4" Wirsbo hePEX™ plus and Wirsbo AQUAPEX® tubing with ProPEX or QS-style fitting assemblies
- 5/8" and 3/4" Uponor multi-layer composite (MLC) tubing (formerly MultiCor®) with QS-style fitting assemblies

**Note:** The maximum recommended flow to the manifold based on manifold body diameter is 45 gallons per minute (gpm).

Part No.	Part Description
Q2811263	2" x 4' Copper Manifold with 5/8" ProPEX Ball Valves, 12 outlet
Q2811275	2" x 4' Copper Manifold with 3/4" ProPEX Ball Valves, 12 outlet
Q2821263	2" x 4' Copper Manifold with 5/8" ProPEX Ball and Balancing Valves, 12 outlet
Q2821275	2" x 4' Copper Manifold with 3/4" ProPEX Ball and Balancing Valves, 12 outlet
F2811220	2" x 4' Copper Manifold with R20 Threaded Ball Valves, 12 outlet
F2811225	2" x 4' Copper Manifold with R25 Threaded Ball Valves, 12 outlet
F2821220	2" x 4' Copper Manifold with R20 Threaded Ball and Balancing Valves, 12 outlet
F2821225	2" x 4' Copper Manifold with R25 Threaded Ball and Balancing Valves, 12 outlet
A2402000	2" Copper End Cap Spun End with Drain and Vent Connections

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