**Introduction**

Uponor’s WIPEX™ fittings are manufactured from a dezincification-resistant alloy, DZR brass, and are specifically designed for connecting 1” to 4” Uponor PEX tubing within the Ecoflex pre-insulated pipe system. The unique design of the WIPEX fitting features an eccentric outer sleeve for easier grip and an even force when inserting the tubing. The inner sleeve features a threaded profile and includes an o-ring to ensure a secure, tight seal (see Figure 1). The maximum operating pressure and temperature for WIPEX fittings is 87 psi at 203°F.

**Getting Started**

Check the contents of this package. For damaged or missing contents, please contact your Uponor sales representative or distributor for assistance.

The package includes:
- WIPEX Fitting(s)
- O-ring(s)
- Bolts, washers and nuts
- WIPEX Fittings Instruction Sheet

**Tools and Parts Required**
- Plastic tube cutter
- Low-friction lubrication (MoS2)
- De-burring tool or knife
- Wrench (See Table 1 for sizes)

**Table 1: Wrench Sizes for Tubing**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Part Description</th>
<th>Wrench Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>5550010</td>
<td>PEX 1” x NPT 1”</td>
<td>FD 2 – 10mm</td>
</tr>
<tr>
<td>5550013</td>
<td>PEX 1¼” x NPT 1¼”</td>
<td>FD 2 – 10mm</td>
</tr>
<tr>
<td>5550015</td>
<td>PEX 1½” x NPT 1½”</td>
<td>FD 2 – 13mm</td>
</tr>
<tr>
<td>5550020</td>
<td>PEX 2” x NPT 2”</td>
<td>FD 2 – 13mm</td>
</tr>
<tr>
<td>5550025</td>
<td>PEX 2½” x NPT 2”</td>
<td>FD 2 – 17mm</td>
</tr>
<tr>
<td>5550030</td>
<td>PEX 3” x NPT 2½”</td>
<td>FD 2 – 19mm</td>
</tr>
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<td>5550035</td>
<td>PEX 3½” x NPT 3”</td>
<td>FD 2 – 24mm</td>
</tr>
<tr>
<td>5550040</td>
<td>PEX 4” x NPT 4”</td>
<td>FD 2 – 24mm</td>
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</tbody>
</table>

Figure 1: Eccentric Design of the WIPEX Fitting
Installation

**Important:** Read this instruction sheet completely before beginning installation. If you have any questions about these instructions, please contact your Uponor sales representative or distributor for assistance.

1. Cut the tubing with an appropriate plastic-pipe cutter. If using another method for cutting the tubing, ensure the shavings inside the tube are removed prior to installing the fitting to avoid blocking valves.

2. Chamfer the tubing bore with a de-burring tool or knife, and remove any external burrs. This prevents the o-ring from damage or from being dislodged from its groove during installation.

3. Use a suitable pair of pliers to dismount the outer sleeve. (See Figure 5 for an example of suitable pliers.)

4. Place a bolt head between the pads, and remove the outer sleeve.

5. Mount the outer sleeve onto the tubing. Make sure to position the outer sleeve correctly towards the inner sleeve, so the locking grooves engage.

6. To ensure easy mounting of the pipe onto the inner sleeve, lubricate the o-ring, preferably with an environmentally friendly silicone spray or soap.
7. Mount the pipe on the insert sleeve and push the outer sleeve until it reaches the stop support for the tubing.

![Figure 9: Push Outer Sleeve to Stop Support]

**Important:** Lubricate the bolt threads and washer with suitable low-friction lubrication (MoS\(_2\)) before tightening.

8. Tighten the WIPEX fitting.

**Note:** Tighten slowly by hand to avoid thread problems when assembling acid-resistant, stainless-steel bolts in a screw joint. If using a tightening machine, only use a low number of revolutions. Use open-ended or ring spanners and slowly tighten until the pads of the clamping sleeve are in contact with one another (see Figure 10).

![Figure 10: Tighten the Fitting]

**Caution:** If the pads do not come in contact, wait 30 minutes and then try tightening again until the pads are in contact with one another (see Figure 11).

9. Perform pressure testing according to current standards. If standards are not available, refer to the following instructions:

- Vent all air from the system and apply one-and-a-half times the normal operating pressure.
- Maintain this pressure for 30 minutes, and visually inspect the joints.
- Quickly drain off water until the pressure falls to one-half the normal operating pressure, and close the drain valve.
- If the pressure rises to a constant level higher than one-half the normal operating pressure, the system is tight.
- Maintain this pressure for 90 minutes, and visually inspect the fittings during this time. A drop in pressure indicates a leak in the system.

### Specifications

<table>
<thead>
<tr>
<th>Style</th>
<th>Profile Dimensions</th>
<th>Pressure Class</th>
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<tbody>
<tr>
<td>1</td>
<td>2½&quot; to 4&quot;</td>
<td>87 psi at 203°F</td>
</tr>
<tr>
<td>2</td>
<td>1&quot; to 2&quot;</td>
<td>87 psi at 203°F</td>
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