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# **Uponor**

PRE-INSULATED PIPE SYSTEMS **WIPEX™ FITTINGS** 

**INSTRUCTION SHEET** 

# Uponor WIPEX™ Fittings Instruction Sheet

#### 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.

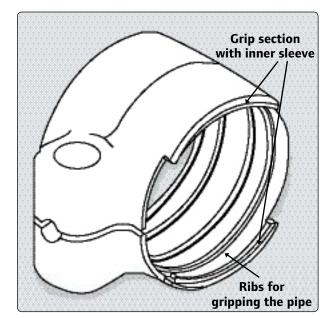


Figure 1: Eccentric Design of the WIPEX Fitting

### **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)

Part No.	Part Description	Wrench Size
5550010	PEX 1" x NPT 1"	FD 2 – 10mm
5550013	PEX 1¼" x NPT 1¼"	FD 2 – 10mm
5550015	PEX 1½" x NPT 1½"	FD 2 – 13mm
5550020	PEX 2" x NPT 2"	FD 2 – 13mm
5550025	PEX 2½" x NPT 2"	FD 2 – 17mm
5550030	PEX 3" x NPT 21/2"	FD 2 – 19mm
5550035	PEX 3½" x NPT 3"	FD 2 – 24mm
5550040	PEX 4" x NPT 4"	FD 2 – 24mm

**Table 1: Wrench Sizes for Tubing** 

#### **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.



Figure 2: Cut the Tubing

**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.



Figure 3: Chamfer the Tubing

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



**Figure 4: Dismounting Outer Sleeve** 



Figure 5: Example of Suitable Pliers

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



Figure 6: Insert Bolt Head

**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.

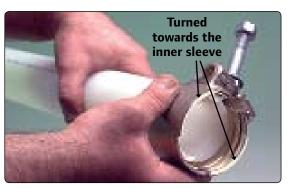


Figure 7: Mount the Outer Sleeve

**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.

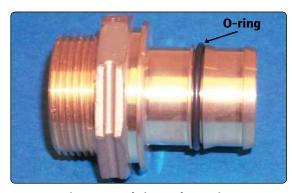


Figure 8: Lubricate the O-ring

**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 (MoS2) 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



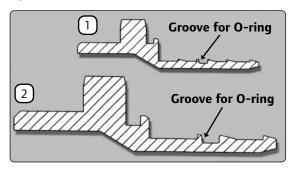
**Caution:** If the pads do not come in contact, wait 30 minutes and then try tightening again until the pads are in contact with one another (see **Figure 11**).



Figure 11: Grip and Seal Between Fitting and Pipe

- **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**



Style	Profile Dimensions	Pressure Class
1	2½" to 4"	87 psi at 203°F
2	1" to 2"	87 psi at 203°F