

Aquatherm Technical Bulletin

201408E - AQTTB

Aquatherm Transition Fittings

Date Issued: 7 August 2014 Withdrawn 1 Oct. 2017

Aquatherm produces two types of threaded transition fittings.

- 1. Stainless steel threaded transition fittings.
- 2. Brass threaded transition fittings.

The brass fittings are further differentiated by type of brass and end-use.

- a. Industrial use (dezincification-resistant DZR low-lead brass).
- b. Potable water lead-free, dezincification resistant (DZR) type (meeting the revised Safe Drinking Water Act requirements of less than 0.25% lead which went into effect in Jan-2014).

This bulletin will focus on the differences between the types of metal transition fittings and how to visually distinguish between them.

Stainless Steel Threaded Transition Fittings

The stainless steel transition fittings are fairly easy to identify as the metal threaded portion has the typical appearance of polished stainless steel. The stainless steel fittings are made from 316L alloy and are recommended for use in chemically sensitive applications where brass may not be suitable, but where metals components can still be used.

Stainless steel fittings may also be used for potable water applications as they are 100% lead –free. The printing on the side of the fitting denotes that it complies with potable water regulations. See photo below. The text reads, "cNSF us-pw-G". This text indicates that the fitting complies with US potable water (pw) standards and the Safe Drinking Water Act (SDWA).



Figure 1: Stainless Steel Transition fitting



The MPT stainless steel fittings have similar markings as the FPT fittings. Both are available in NPT or ISO threads.

Brass Fittings

First, let's look at the industrial type of brass fitting. The industrial brass fittings are made with marine-grade DZR brass and are acceptable for a wide variety of industrial and mechanical applications.

The Industrial Brass fittings are identified by a double groove on the face of the female fitting (see Fig. 1) and on the inside of the male fitting (see Fig. 2).



Figure 2: Industrial Brass Transition Fitting Showing Marking Rings

They are also identified by the printing on the side of the fitting which reads, "cNSF us-ind". See photo below.



Figure 3: Industrial Brass Transition Fitting





Lead-free (Potable) Brass fittings

The Lead-free (Potable) Brass fittings are compliant with the Reduction of Lead in Drinking Water Act and are recommended for with potable water systems. The new drinking water requirements took effect in all areas of the United States beginning January 1, 2014.



Figure 4: Potable Water Brass Transition Fitting Showing Identifying Rings



Figure 5: Potable Water Brass Transition Fitting

These fittings are distinguished from the Industrial Brass fitting by a single groove cut into the face or the inside surface of the fitting and the text, "cNSF us-pw-G" printed on the side of the fitting.