

STANDARD INFORMATION

Standard Number: ASME 112.18.6 / CSA B125.6
Standard Name: Flexible Water Connections
Standard Edition and Issue Date: 2nd Edition Dated July 1, 2017
Date of Revision: July 1, 2017
Date of Previous Revision of Standard: January 1, 2014

EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

Effective Date: **January 31, 2019**

IMPACT, OVERVIEW, AND ACTION REQUIRED

Impact Statement: A review of all Listing Reports is necessary to determine which products comply with new/revise requirements and which products will require re-evaluation. **NOTE:** Effective immediately, this revised standard will be exclusively used for evaluation of new products unless the Applicant requests in writing that current requirements be used along with their understanding that their listings will be withdrawn on Effective Date noted above, unless the product is found to comply with new/revise requirements.

Overview of Changes: Specific details of new/revise requirements are found in table below.

- Revised working temperatures
- New low lead requirements
- Updated fill valve thread requirements
- Updated ice maker pressure drop requirements

Specific details of new/revise requirements are found in table below.

If the applicable requirements noted in the table are not described in your report(s), these requirements will need to be confirmed as met and added to your report(s) such as markings, instructions, test results, etc. (as required).

Client Action Required:

Information – To assist our Engineer with review of your Listing Reports, please submit technical information in response to the new/revise paragraphs noted in the attached or explain why these new/revise requirements do not apply to your product (s).

Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.



STANDARD INFORMATION

CLAUSE	VERDICT	COMMENT
<p><i>Additions to existing requirements are <u>underlined</u> and deletions are shown lined out below.</i></p>		
4	Info	General requirements
4.1	Info	Toxicity and lead content
<i>New clause added;</i>		
4.1.3		Flexible connectors intended to convey or dispense water for human consumption through drinking or cooking shall not contain a weighted average lead content in excess of 0.25% when evaluated in accordance with the test method specified in NSF/ANSI 372.
4.4	Info	Connections
Fill valve threads		
4.4.4		Fill valve threads shall comply with ASME A112.19.5 <u>ASSE 1002/ASME A112.1002/CSA B125.12</u> , except that fill valve threads may be Class 2B.
5	Info	Performance requirements and test methods
5.2	Info	Intermittent impulse pressure test
Procedure		
The intermittent impulse pressure test shall be conducted as follows:		
a) Supply water to the specimen in such a manner that the flowing pressure upstream of the specimen does not exceed 517 kPa (75 psi) and the flow rate is 7.6 ± 1.9 L/min (2.0 ± 0.5 gpm), at the following temperatures:		
5.2.2	i)	82 ± 3 °C (180 ± 5 °F) for flexible connectors intended for hot and cold water applications; and
	ii)	<u>49 ± 3 °C (120 ± 5 °F) for flexible connectors intended only for cold water applications.</u>
b) For each cycle, stop the flow and increase the pressure from 517 kPa (75 psi) to 1240 ± 35 kPa (180 ± 5 psi).		
c) Cycle the specimen for 100 000 cycles at a minimum of 7 cycles/min at the following rates:		
i) 3 ± 1 s at 517 kPa (75 psi) maximum; and		
ii) 3 ± 1 s at 1240 ± 35 kPa (180 ± 5 psi) maximum.		
5.3	Info	Burst pressure test



The burst pressure test shall be conducted as follows:

- 5.3.2
- a) Fill the specimen with water.
 - b) For flexible connectors intended
 - i) for hot and cold water applications, submerge the specimen in water at $82 \pm 3 \text{ }^\circ\text{C}$ ($180 \pm 5 \text{ }^\circ\text{F}$) for 30 min. Alternatively, if the medium is air, condition the specimen for 60 min at ambient laboratory conditions while flowing water at $82 \pm 3 \text{ }^\circ\text{C}$ ($180 \pm 5 \text{ }^\circ\text{F}$) through it; or
 - ii) only for cold water applications, submerge the specimen in water at $49 \pm 3 \text{ }^\circ\text{C}$ ($120 \pm 5 \text{ }^\circ\text{F}$) for 30 min. Alternatively, if the medium is air, condition the specimen for 60 min at ambient laboratory conditions while flowing water at $49 \pm 3 \text{ }^\circ\text{C}$ ($120 \pm 5 \text{ }^\circ\text{F}$) through it.
 - c) Pressurize the specimen at $1724 \pm 35 \text{ kPa}$ ($250 \pm 5 \text{ psi}$).
 - d) Hold the specimen at the temperature and pressure specified in Items b) and c) for 30 min.
 - e) Remove the specimen from the water, if applicable.
 - f) Inspect the specimen for leaks while it is still being subjected to the test pressure.

6

Info

Markings

New clause added;

6.4.3

In addition to meeting the requirements of Clause 6.1 or 6.2, flexible connectors intended only for cold water applications shall be permanently marked “Only for use with cold water”.*

* The equivalent French wording is “Pour utilisation avec eau froide seulement”.

New clause added;

6.4.4

The requirement specified in Clause 6.4.3 shall not apply to flexible connectors that are an integral part of a fixture fitting that complies with ASME A112.8.1/CSA B125.1.



Maximum pressure drop for flexible connectors

Table 1

Application	Typical nominal sizes	Mandrel size, mm (in)	Flow rate, L/m (gpm)	Maximum pressure drop, kPa (psi)
Clothes washer	3/4 in hose thread	127.0 (5.0)	15.1 (4.0)	172.4 (25.0)
Faucet or dishwasher	3/8 to 1/2 in OD tube	127.0 (5.0)	7.6 (2.0)	103.4 (15.0)
Fill valve	3/8 to 1/2 in OD tube	127.0 (5.0)	7.6 (2.0)	69.0 (10.0)
General connector	NPS-1	304.8 (12.0)	94.6 (25.0)	13.8 (2.0)
	NPS-1-1/4	381.0 (12.0)	113.6 (30.0)	13.8 (2.0)
	NPS-1-1/2	457.2 (18.0)	113.6 (30.0)	13.8 (2.0)
	NPS-2	609.6 (24.0)	151.4 (40.0)	13.8 (2.0)
Icemaker	1/4 in OD tube	127.0 (5.0)	3.8 (1.0) 1.9 (0.5)	110.3 (16.0)
Water heater	5/8 to 7/8 in OD tube or NPS-3/4 pipe	127.0 (5.0)	37.9 (10.0)	27.6 (4.0)

CUSTOMERS PLEASE NOTE: This Table and column “Verdict” can be used in determining how your current or future production is or will be in compliance with new/revised requirements.