Sanitary tapware - Shower hoses for sanitary tapware for water supply systems of type 1 and type 2 - General te.,ion technical specification



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1113:2008+A1:2011 sisaldab Euroopa standardi EN 1113:2008+A1:2011 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.03.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 23.02.2011.

Standard on kättesaadav Eesti standardiorganisatsioonist.

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ICS 23.040.70, 91.140.70

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EUROPÄISCHE NORM

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English Version

Sanitary tapware - Shower hoses for sanitary tapware for water supply systems of type 1 and type 2 - General technical specification

Robinetterie sanitaire - Flexibles de douches pour robinetterie sanitaire pour les systèmes d'alimentation type 1 et type 2 - Spécifications techniques générales

Sanitärarmaturen - Brauseschläuche für Sanitärarmaturen für Wasserversorgungssysteme vom Typ 1 und Typ 2 - Allgemeine technische Spezifikation

This European Standard was approved by CEN on 12 January 2008 and includes Amendment 1 approved by CEN on 9 January 2011.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN 1113:2008+A1:2011) has been prepared by Technical Committee CEN/TC 164 "Water supply", the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2011, and conflicting national standards shall be withdrawn at the latest by August 2011.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document includes Amendment 1, approved by CEN on 2011-01-09.

This document supersedes [A] EN 1113:2008 (A].

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A].

The scope is enlarged to include requirements for shower hoses used with water systems of type 1 and type 2. See Tables 1, 2, 3 and 4.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

In respect of potential adverse effects on the quality of water intended for human consumption caused by the product covered by this standard.

- This standard provides no information as to whether the product may be used without restriction in any of the Member States of the EU or EFTA.
- option.
 .teristics (While awaiting the adoption of verifiable European criteria, existing national regulations concerning the use and/or the characteristics of this product remain in force.

1 Scope

This European Standard specifies:

- the dimensional, leaktightness, mechanical and hydraulic characteristics with which shower hoses shall comply;
- the procedures for testing these characteristics.

This European Standard applies to shower hoses of any material used for ablutionary purposes and intended for equipping and supplementing sanitary tapware for baths and showers.

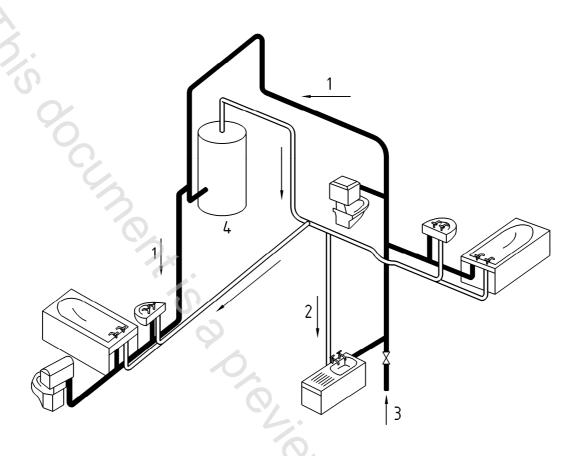
This European Standard applies to shower hoses connected downstream of the obturator of the tapware.

Hoses which are an integral part of sanitary tapware (sink and wash basin mixing valves) or hoses intended to connect sanitary tapware to the water supplies are not covered by this European Standard.

Details of pressures and temperatures are given in Table 1.

Table 1 — Conditions of use/Classifications

Type 1 see Figure 1 Dynamic Pressure 0,05 MPa to 0,5 MPa 0,5 bar to 5 bar Dynamic Pressure (0,1 to 0,3) MPa (1,0 to 3,0) bar (1,0 to 3,0) bar Min. 0,42 l/s (25,2 l/min) at 0,3 + 0,02 MPa (3 + 0,2 bar) Type 2 see Figure 2 Dynamic Pressure (0,01 to 0,2) MPa (0,01 to 0,2) MPa (0,1 to 2) bar Dynamic Pressure (0,02 to 0,10) MPa (0,1 bar) Class E (0,01 to 0,2) MPa (0,2 to 1,0) bar (0,2 to 1,0) bar (0,2 to 1,0) bar Class H (0,01 kl/min ≤ Q)	Water Supply	Operating range of shower hoses		Flow rates See Table 3	
Type 1 see Figure 1 Dynamic Pressure 0,05 MPa to 0,5 MPa (1,0 to 3,0) bar 0,5 bar to 5 bar Dynamic Pressure (1,0 to 3,0) bar 0,5 bar to 5 bar Dynamic Pressure (0,01 to 0,2) MPa (0,1 to 2) bar Type 2 see Figure 2 Dynamic Pressure (0,02 to 0,10) MPa (0,1 bar) Class E 0,06 l/s < Q < 0,18 l/s (3,6 l/min < Q < 10 l/min.) at 0,01 MPa (0,1 bar) Class H 0,18 l/s ≤ Q (10,8 l/min ≤ Q)		Limits Recommended			
Type 2 see Figure 2 (0,01 to 0,2) MPa (0,02 to 0,10) MPa (0,2 to 1,0) bar (0,1 bar) Class H (0,18 l/s ≤ Q (10,8 l/min ≤ Q)		0,05 MPa to 0,5 MPa	(0,1 to 0,3) MPa		
at 0,01 MPa (0,1 bar)	• •	(0,01 to 0,2) MPa	(0,02 to 0,10) MPa	0,06 l/s < Q < 0,18 l/s (3,6 l/min < Q < 10,8 l/min.) at 0,01 MPa (0,1 bar)	
Temperature $T \le 70^{\circ}C$ $T \le 42^{\circ}C$	Temperature	T <u><</u> 70°C	T <u><</u> 42°C	7	

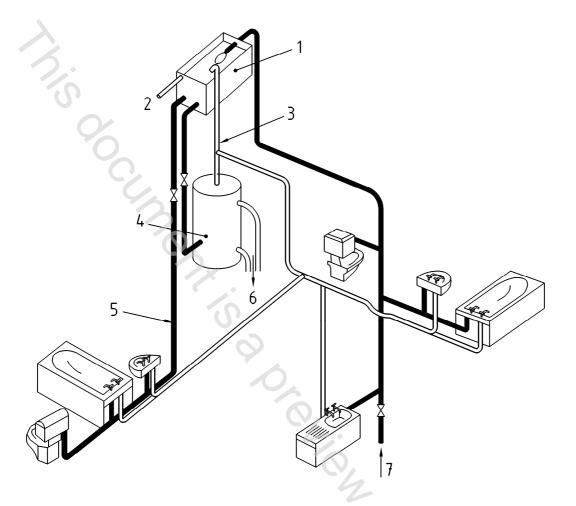


Key

- 1 Cold water
- 2 Hot Water
- 3 Mains supply pipe (Supply pressures up to 10 bar)
- 4 Water heater

Figure 1 — Type 1 Water supply system with a pressure range of (0,05 – 1,0) MPa (0,5 - 10) bar

 A_1



Key

- 1 cold water storage cistern (cover omitted for clarity)
- 2 warning pipe
- 3 vent pipe
- 4 hot water cylinder
- 5 alternative cistern fed cold supply to sanitary appliances
- 6 to boiler
- 7 mains supply pipe (Supply pressures up to 10 bar)

Figure 2 — Type 2 Water supply system - with a pressure range of (0,01 - 1.0) MPa, (0,1 - 10) bar. A vented domestic hot water and cold water supply system incorporating gravity hot water, mains cold water and alternative gravity cold water supply to sanitary appliances [41]

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 248, Sanitary tapware – General specification for electrodeposited coatings of Ni-Cr

EN ISO 228-1, Pipe threads where pressure-tight joints are not made on the threads – Part 1: Dimensions, tolerances and designation (ISO 228-1:2000)

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

shower hose

flexible supply pipe which connects sanitary tapware to a shower handset

4 Designation

Hoses complying with this European Standard are designated by:

- the connecting thread dimensions G $1/2 \times G 1/2$ or G $1/2 \times G 3/4$;
- reference to this European Standard: EN 1113;
- the length;
- the material of the external sheath (plastic, metal);
- the type of nuts and if conical the dimension C;
- flow rate class (see Table 1).

EXAMPLE Shower hose G 1/2, cone 26 × G 3/4, length 1,5 m, metal sheath, EN 1113, class H.

5 Marking

Hoses complying with this European Standard shall be marked permanently and legibly with the manufacturer's mark or the supplier's mark.

6 Materials

6.1 Chemical and hygienic requirements

All materials coming into contact with water intended for human consumption shall not present any risk to health at temperatures up to the maximum working temperature. They shall not cause any deterioration to water intended for human consumption in terms of quality, appearance, smell or taste.

Within the recommended limit for correct operation (see Table 1) the materials shall not undergo any change which would impair the performance of shower hoses.