

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

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

| | |
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| <p>Käesolev Eesti standard EVS-EN 1112:2008 sisaldab Euroopa standardi EN 1112:2008 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 24.04.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 27.02.2008.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p> | <p>This Estonian standard EVS-EN 1112:2008 consists of the English text of the European standard EN 1112:2008.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 24.04.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 27.02.2008.</p> <p>The standard is available from Estonian standardisation organisation.</p> |
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English Version

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

Robinetterie sanitaire - Douches pour robinetterie sanitaire pour les systèmes d'alimentation en eau de types 1 et 2 - Spécifications techniques générales

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

This European Standard was approved by CEN on 12 January 2008.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

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Foreword

This document (EN 1112:2008) 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 2008, and conflicting national standards shall be withdrawn at the latest by August 2008.

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 supersedes EN 1112:1997 and EN 13904:2003

The scope is enlarged to include requirements for shower outlets used with water supply systems of type 1 and type 2. See Tables 1, 3, 4, 5 and 7.

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, 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 the 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;
- it should be noted that while awaiting the adoption of verifiable European criteria, existing national regulations concerning the use and/or the characteristics of these products remain in force.

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1 Scope

This European Standard specifies:

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

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

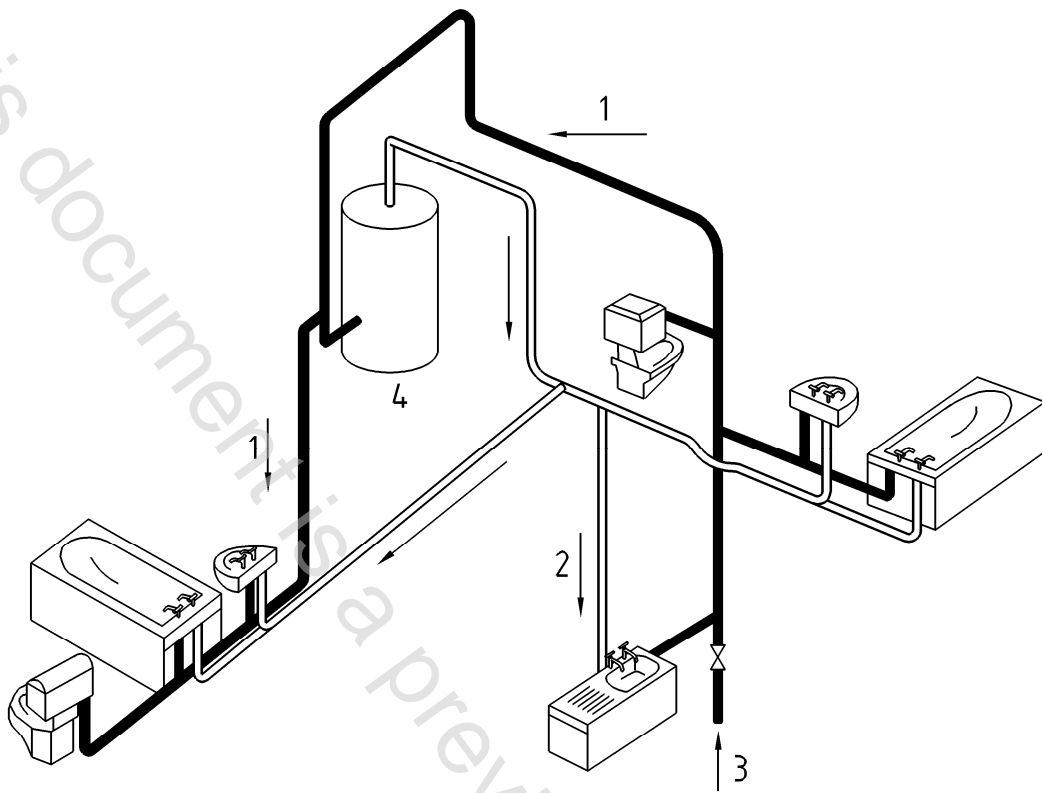
This European Standard applies to shower heads and hand showers connected downstream of the obturator of the tapware.

Integral and remote spray attachments incorporated in tapware (e.g. sink and wash basin mixing valves) are not covered by this standard.

Details of pressures and temperatures are given in Table 1.

Table 1 — Conditions of use/Classifications

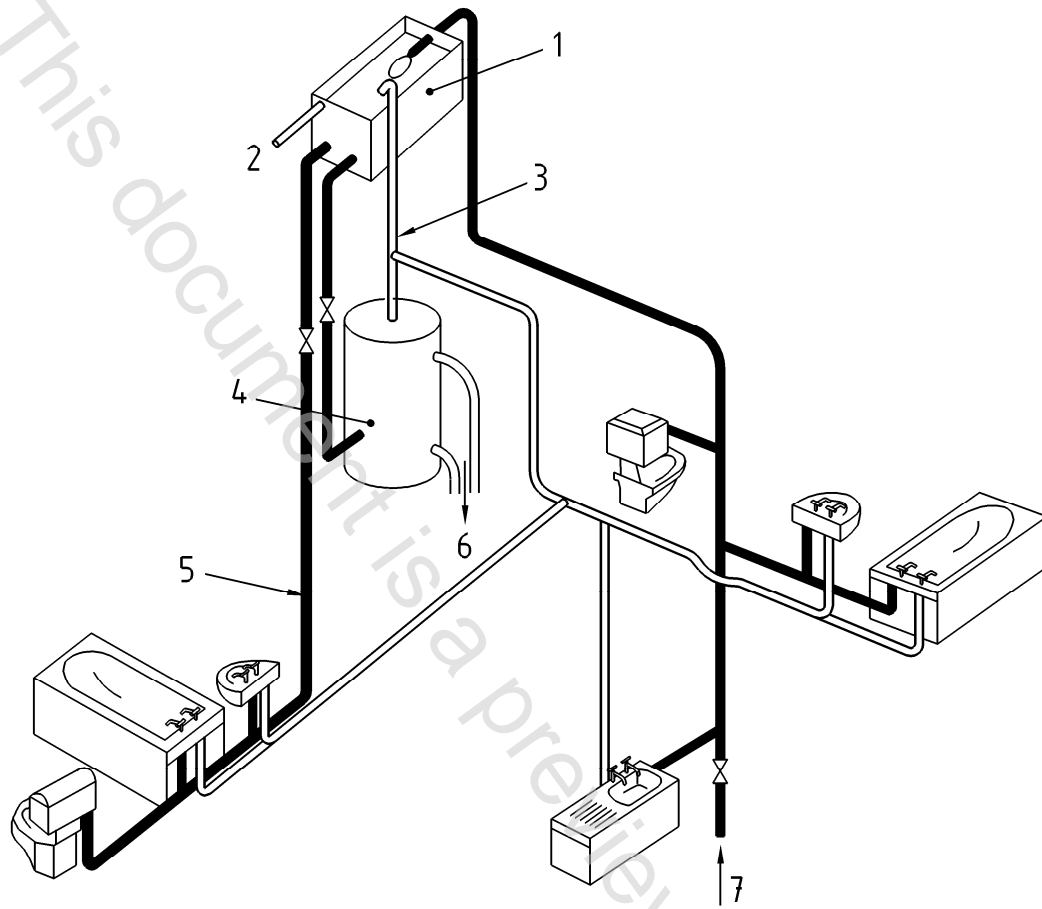
| Water Supply system | Operating range of shower outlets | | Flow rate classes | | Acoustics | Marking |
|------------------------|--|--|-------------------|---|-----------------|----------------------------|
| | Limits | Recommended | | | See clause 12.0 | See clause 6.0 |
| Type 1 see Figure 1 | <u>Dynamic Pressure</u> (0,05 to 0,5) MPa (0,5 to 5) bar | <u>Dynamic Pressure</u> (0,1 to 0,3) MPa (1,0 to 3) bar | ZZ | (0,025 ≤ Q < 0,12) l/s (1,5 ≤ Q < 7,2) l/min | Group I | for example I A II B |
| | | | Z | (0,12 ≤ Q < 0,20) l/s (7,2 ≤ Q < 12) l/min | | |
| | | | A | (0,20 ≤ Q < 0,25) l/s (12 ≤ Q < 15) l/min | | |
| | | | S | (0,25 ≤ Q < 0,33) l/s (15 ≤ Q < 20) l/min | | |
| | | | B | (0,33 ≤ Q < 0,42) l/s (20 ≤ Q < 25) l/min | | |
| | | | C | (0,42 ≤ Q < 0,50) l/s (25 ≤ Q < 30) l/min | | |
| | | | D | (0,50 ≤ Q < 0,63) l/s (30 ≤ Q < 38) l/min | | |
| Type 2 see Figure 2 | <u>Dynamic Pressure</u> (0,01 to 0,2) MPa (0,1 to 2) bar | <u>Dynamic Pressure</u> (0,02 to 0,1) MPa (0,2 to 1) bar | E | (0,06 ≤ Q < 0,14) l/s (3,6 ≤ Q < 8,4) l/min at (0,01) MPa (0,1 bar) | (unclassified) | |
| | | | H | (Q ≥ 0,14) l/s (Q ≥ 8,4) l/min at (0,01) MPa (0,1 bar) | | |
| Temperature | T ≤ 70°C | T ≤ 42°C | | | | |



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



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

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 1113, *Sanitary tapware - Shower hoses for sanitary tapware for supply systems type 1 and type 2 – General technical specification*

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)*

EN ISO 3822-1, *Acoustics – Laboratory tests on noise emission from appliances and equipment used in water supply installations - Part 1: Method of measurement (ISO 3822-1:1999)*

EN ISO 3822-4, *Acoustics – Laboratory tests on noise emission from appliances and equipment used in water supply installations - Part 4: Mounting and operating conditions for special appliances (ISO 3822-4:1985)*

3 Terms and definitions

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

3.1

shower outlet

device for ablutionary purposes which allows water to be emitted in the form of jets or water droplets

3.2

spray plate

device with orifices through which water passes and forms a spray of water with separate, definable jets or water droplets

3.3

shower arm

component which supports a shower head and connects it to the water supply

4 Classification

— Shower handsets.

Shower handsets are moveable hand held shower outlets which are connected to the sanitary tapware via a shower hose, complying with EN 1113. They can be hung directly on the tapware or on the wall with the aid of an appropriate support.

— Shower heads and Body showers.

— Shower heads are fixed overhead shower outlets which direct water onto the user from above.

— Body showers are shower outlets fixed to a vertical wall and direct water laterally onto the user.