Inlet valves for flushing cisterns with internal overflow

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 14124:2004 sisaldab Euroopa standardi EN 14124:2004 ingliskeelset teksti. Käesolev dokument on jõustatud 23.11.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 14124:2004 consists of the English text of the European standard EN 14124:2004. This document is endorsed on 23.11.2004 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: The purpose of this European Standard is to specify: - the dimensional, hygiene, tightness, pressure performance, hydraulic, acoustic, mechanical and physico-chemical characteristics which inlet valves for flushing cisterns shall comply with; - the test methods for checking these characteristics; - marking and presentation.	**Scope:** The purpose of this European Standard is to specify: - the dimensional, hygiene, tightness, pressure performance, hydraulic, acoustic, mechanical and physico-chemical characteristics which inlet valves for flushing cisterns shall comply with; - the test methods for checking these characteristics; - marking and presentation.

ICS 91.140.70

Võtmesõnad: closets, definitions, design, filling valves, flushing cisterns, inspection, marking, overflows, rinsing, sanitary appliances, specification (approval), specifications, testing, toilet facilities, valves, wc compartments, wc pans

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 14124

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ICS 91.140.70

English version

Inlet valves for flushing cisterns with internal overflow

Robinet pour remplissage de réservoir de chasse avec trop-plein intérieur

Füllventile für Spülkästen mit integriertem Überlauf

This European Standard was approved by CEN on 9 July 2004.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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

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Contents

Foreword

This document (EN 14124:2004) 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 March 2005, and conflicting national standards shall be withdrawn at the latest by March 2005.

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

1 Scope

The purpose of this document is to specify:

— the dimensional, hygiene, tightness, pressure performance, hydraulic, acoustic, mechanical and physico-chemical characteristics which inlet valves for flushing cisterns shall comply with;

— the test methods for testing these characteristics;

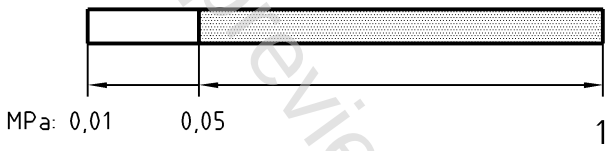
— marking and presentation.

This document applies exclusively to the valve itself and it does not prejudge compliance with health regulations as the inlet valve is being fitted into the cistern.

This document does not cover valves intended to equip flushing cisterns with external overflow.

This document applies to valves such as float valves limit operating at pressures up to NP 10 (whose operating range is from 0,05 MPa to 1 MPa – 0,5 bar to 10 bar) designed to supply cold water to flushing cisterns for use with WC pans, that are permanently connected to a potable water supply system.

The working range can be extended downwards (< 0,05 MPa – 0,5 bar) down to 0,01 MPa (0,1 bar), in which case the manufacturer's instructions shall indicate this possibility as well as the recommended working range.



Range which shall be covered

Optional range

This document does not apply to valves used for other applications: pumping tanks, storage tanks, etc.

Table 1 — Working conditions for flushing cistern inlet valves

	Operating limits	Limit recommended for proper functioning (dynamic pressure)
Minimum dynamic pressure	P ≥ 0,05 MPa (0,5 bar) [a]	0,1 MPa ≤ P ≤ 0,5 Mpa (1 bar ≤ P ≤ 5 bar)
Maximum static pressure	P ≤ 1 MPa (10 bar)	
a According to the manufacturer's indication, the dynamic pressure (opening-closing) can be lowered.		

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 ISO 228-1:2003, *Pipe threads where pressure-tight joints are not made on the threads - Part 1: Dimensions, tolerances and designation (ISO 228-1:2000).*

EN ISO 3822-1:1999, *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 3822-4:1997, *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 3822-4:1997).*

EN ISO 5167-1:2003, *Measurement of fluid flow by means of pressure differential devices inserted in circular cross-section conduits running full - Part 1: General principles and requirements (ISO 5167:2003).*

EN 1717:2000, *Protection against pollution of potable water in water installations and general requirements of devices to prevent pollution by backflow*.

3 Terms and definitions

For the purposes of this document, the following term and definition apply.

3.1
inlet valve
ensuring automatic filling of a flushing cistern to a pre-set water level

4 Materials

The choice of materials is left to the manufacturer's initiative, except for end connections which shall be manufactured from copper alloy or any other material giving similar performance.

All materials in contact with water intended for human consumption shall not present any health risk up to a temperature of 25 °C. They shall not cause any deterioration of water intended for human consumption with regard to food quality, appearance, smell or taste.

Within the limits recommended in clause 1 for correct operation, the materials shall not be subjected to any deterioration likely to affect the performance of the valve. Parts submitted to pressure shall withstand the corresponding operating limits. Materials with insufficient corrosion resistance shall be protected against corrosion.

5 Design and manufacture

5.1 Composition of the inlet valve

A flushing cistern inlet valve comprises:

— a single supply connection;

— one or more outlets;