SLOVENSKI STANDARD
SIST EN 16146:2013+A1:2015

01-februar-2015

Nadomešča:
SIST EN 16146:2013

Sanitarne armature - Izvlečljive gibke cevi za sanitarne armature sistemov za oskrbo z vodo tipa 1 in tipa 2 - Splošne tehnične zahteve

Sanitary tapware - Extractable shower hoses for sanitary tapware for supply systems type 1 and type 2 - General technical specification

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

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

Ta slovenski standard je istoveten z: **EN 16146:2012+A1:2014**

ICS:

91.140.70	Sanitarne naprave	Sanitary installations

SIST EN 16146:2013+A1:2015 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 16146:2012+A1

November 2014

ICS 91.140.70

Supersedes EN 16146:2012

English Version

Sanitary tapware - Extractable shower hoses for sanitary tapware for supply systems type 1 and type 2 - General technical specification

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

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

This European Standard was approved by CEN on 10 November 2012 and includes Amendment 1 approved by CEN on 9 September 2014.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword

This document (EN 16146:2012+A1:2014) 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 May 2015, and conflicting national standards shall be withdrawn at the latest by May 2015.

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 9 September 2014.

This document supersedes EN 16146:2012.

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A1] 〈A1〉.

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

1 Scope

This European Standard applies to hoses for extractable outlets of any material intended for equipping sanitary tapware for sinks and basins. Such hoses will only be connected downstream of the obturator of the tapware. The tapware will comply with EN 200, EN 817, EN 1111, EN 1286 or EN 1287 (see [1], [2], [3], [5] and [6]).

Hoses intended to connect sanitary tapware to the water supplies are not covered by this standard.

This European Standard specifies:

— the dimensional, mechanical and hydraulic characteristics with which the hose for extractable outlets shall comply;

— the procedures for testing these characteristics.

Details of pressures and temperatures are given in Table 1.

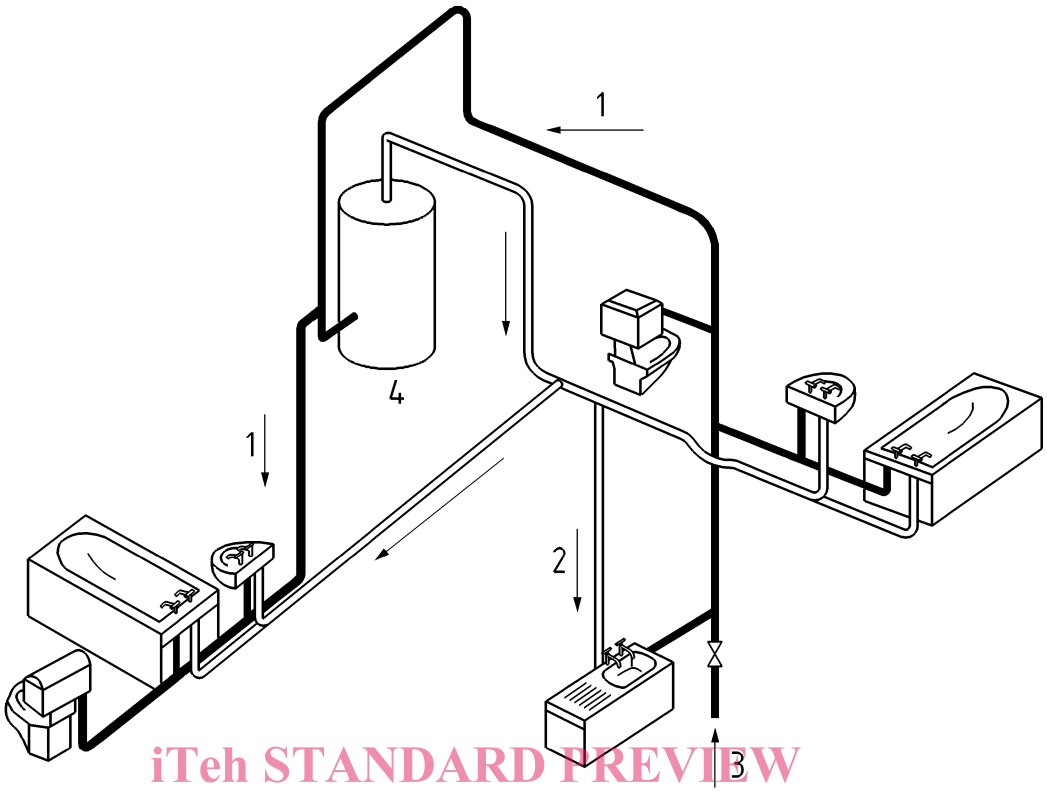
A1

Table 1 — Conditions of use/Classifications

Water supply system	**Operating range of hoses for extractable outlets**		**Flow rates (Q)[a]**
	Limits	**Recommended**	
Type 1 see Figure 1	Dynamic Pressure 0,05 MPa ≤ P ≤ 0,5 MPa (0,5 bar ≤ P ≤ 5 bar)	Dynamic Pressure 0,1 MPa to 0,3 MPa (1,0 bar to 3,0 bar)	Class 1: Q ≥ 0,25 l/s (15 l/min)
			Class 2: Q ≥ 0,15 l/s (9 l/min)
Type 2 see Figure 2	Dynamic Pressure 0,01 MPa to 0,2 MPa (0,1 bar to 2,0 bar)	Dynamic Pressure 0,02 MPa to 0,10 MPa (0,2 bar to 1,0 bar)	Class E: 0,06 l/s < Q < 0,18 l/s (3,6 l/min < Q < 10,8 l/min.)
			Class H: 0,18 l/s ≤ Q (10,8 l/min ≤ Q)
Temperature	T ≤ 70°C	T ≤ 60°C	

[a] See details in Table 3.

A1



Key

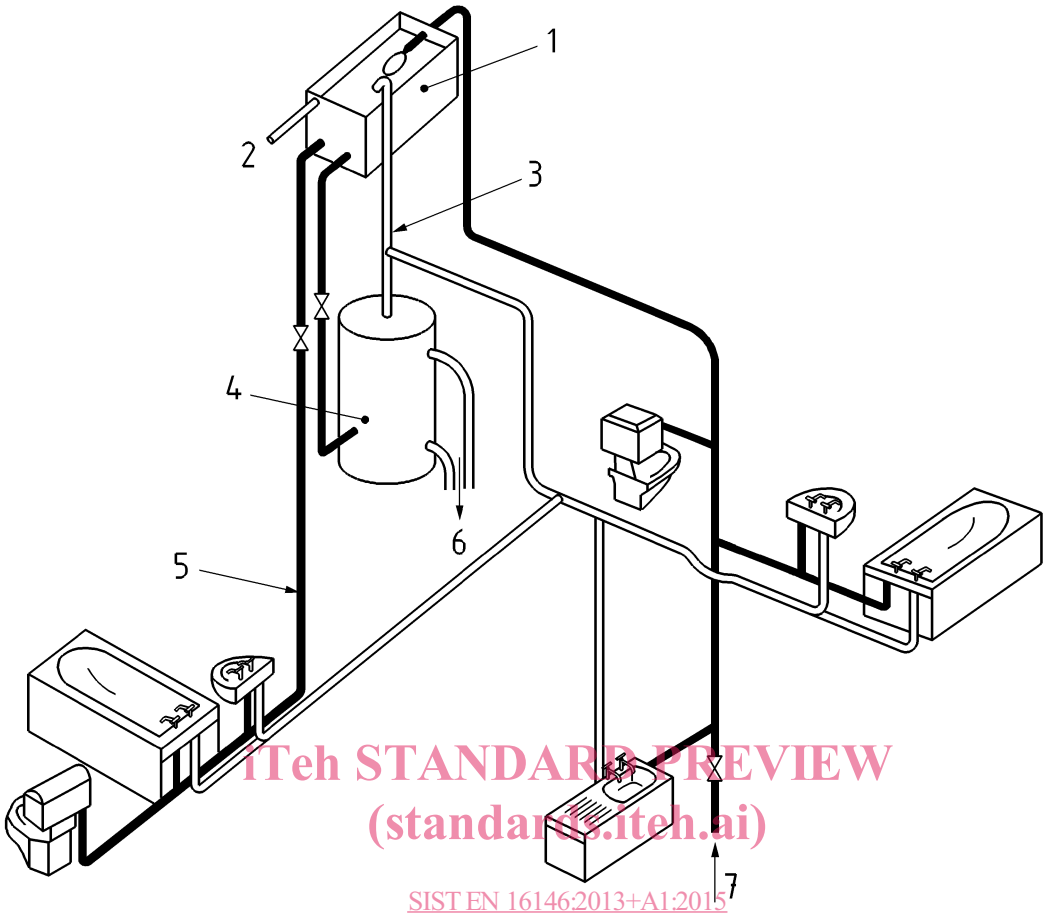
1 cold water

2 hot water

3 mains supply pipe (Supply pressures up to 1,0 MPa (10 bar))

4 water heater

Figure 1 — Type 1 − Supply system - with a pressure range of 0,05 MPa to 1,0 MPa (0,5 bar to 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 1,0 MPa (10 bar))

Figure 2 — Type 2-Supply system - with a pressure range of 0,01 MPa to 1,0 MPa, (0,1 bar to 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 documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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)*

3 Terms and definitions

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

3.1
hose for extractable outlets
flexible supply pipe which connects sanitary tapware to an extractable outlet

4 Designation

Hoses for extractable outlets complying with this standard, are designated by:

— type;

— connecting thread dimensions e.g. G 1/2 × G 1/2 or G 1/2 × G 3/4;

— length;

— material of the external sheath (plastic, metal);

— type of nuts and if conical the dimension C;

— reference to this standard: EN 16146;

— flow rate Class (see Table 1).

EXAMPLE Hose for extractable outlet type, G 1/2, cone 26 × G 3/4, length 1,5m, metal sheath, EN 16146, Class H.

5 Marking

Extractable hoses complying with this standard shall be marked permanently and legibly with the manufacturer's mark or the supplier's mark.

The flow rate class shall appear on the product but it need not be permanent.

Hoses for extractable outlets with special dimensions (see 7.3) delivered together with the tapware need not be marked individually.

6 Materials

6.1 Chemical and hygienic requirements

All materials coming into contact with water intended for human consumption shall present no risk to health.

They shall not cause any change of the drinking water in terms of quality, appearance, smell or taste.

6.2 Exposed surface condition and quality of coating

Visible chromium plated surfaces and Ni-Cr coatings shall comply with the requirements of EN 248.