



SLOVENSKI STANDARD

SIST EN 200:1996

01-februar-1996

Sanitarne armature - Splošne tehnične zahteve za izpustne ventile in mešalne baterije (nazivna velikost 1/2) PN 10 - Najmanjši pretočni tlak 0,05 Mpa (0,5 bar)

Sanitary tapware - General technical specifications for single taps and mixer taps (nominal size 1/2) PN 10 - Minimum flow pressure of 0,05 MPa (0,5 bar)

Sanitärarmaturen - Allgemeine technische Anforderungen an Auslaufventile und Mischbatterien (Nenngröße 1/2) PN 10 - Mindestfließdruck 0,05 MPa (0,5 Bar)

Robinetterie sanitaire - Spécifications techniques générales des robinets simples et mélangeurs (dimension nominale 1/2) PN 10 - Pression dynamique minimale de 0,05 MPa (0,5 bar)

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Ta slovenski standard je istoveten z: EN 200:1989

ICS:

91.140.70 Sanitarne naprave Sanitary installations

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EUROPEAN STANDARD

EN 200

NORME EUROPEENNE

EUROPAISCHE NORM

June 1989

UDC 621.646.2:644.6:621.646.6/.7:696.11:696.4:620.1

Key words: Sanitary valves, cocks, mixing valves, valves and fittings, dimensions, leaktightness, hydraulic properties, mechanical strength, pressure tests, fatigue tests, acoustic properties, marking

English version

Sanitary tapware; General technical specifications for single taps and mixer taps (nominal size 1/2) PN 10; Minimum flow pressure of 0,05 MPa (0,5 bar).

Robinetterie sanitaire; Spécifications techniques générales des robinets simples et mélangeurs (dimension nominale 1/2) PN 10; Pression dynamique minimale de 0,05 MPa (0,5 bar).	Sanitärarmaturen; Allgemeine technische Anforderungen an Auslaufventile und Mischbatterien (Nenngrösse 1/2) PN 10; Mindestfließdruck 0,05 MPa (0,5 Bar).
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This European Standard was accepted by CEN on 1988-06-20. CEN members are bound to comply with the requirements of the CEN/CENELEC Common Rules 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 Central Secretariat or to any CEN member.

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

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue Bréderode 2, B-1000 Brussels

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Ref. No. EN 200:1989 E

EN 200 Page 2

Brief History

This European standard has been prepared by Technical Committee CEN/TC 34 "Water fittings and waste fittings for sanitary appliances - Dimensions - Quality".

The work was initially undertaken with a view to establishing several standards, themselves divided into parts:

prEN 27 - Mixing taps with concealed body for mounting on horizontal surfaces.

prEN 28 - Mixing taps with combined visible body known as "single hole" for mounting on horizontal surfaces.

prEN 29 - Single taps for mounting on vertical surfaces.

The first part of these standards, on dimensional characteristics, reached the final voting stage and was approved in 1977.

The study of mixing taps with visible cross-connected body for mounting on vertical surfaces (prEN 97) was subsequently undertaken; this standard was divided up in the same way as for the other standards. Part 1 was submitted for preliminary voting in 1977 and was approved.

The other parts, 2 (tightness characteristics), 3 (pressure resistance characteristics) and 4 (hydraulic characteristics) of these draft standards were not put to the vote individually, as in 1980, the members of CEN/TC 34 felt it preferable to combine in a single document all specifications on taps and the test procedure for verifying them. Taps, regardless of type, can only be judged to be in conformity with the standard if they satisfy all of these characteristics.

Since 1980, the work of CEN/TC 34 has been supplemented by the study of the torsional strength of the control mechanism, the mechanical endurance of the movable parts, and the acoustic characteristics. Recently, the CEN/TC 34 members unanimously decided to study, in the form of a separate standard, the characteristic of nickel/chromium surface coating (condition of visible surfaces and quality of coating). This standard will be studied as quickly as possible so that the final vote on it may coincide with the final vote on EN 200.

The members of CEN/TC 34 have decided unanimously to prepare a separate standard concerning the characteristics of Nickel - Chromium surface coatings (apparent surface conditions and coating quality). This Standard is EN 248.

According to the Common CEN/CENELEC Rules, following countries are bound to implement this European Standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxemburg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom

Foreword

This European Standard is divided in different clauses, each of them lays down, for each characteristic, the test method and the corresponding requirements.

A tap will be considered to be in accordance with this European Standard if it complies with all of the clauses.

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Contents	page
1 Scope	5
2 Field of application	5
3 Normative references	6
4 Designation	7
5 Marking-identification	7
6 Materials	7
7 Dimensional characteristics	8
7.1 Combination taps with concealed body for mounting on horizontal surfaces	8
7.2 Single hole combination tap assemblies with combined visible body for mounting on horizontal surfaces	12
7.3 Bib taps for mounting on vertical surfaces	14
7.4 Combination taps with visible cross connected body for mounting on vertical surfaces	15
7.5 Dimensions of nozzle outlets to accept aerators	20
8 Watertightness characteristics	21
9 Pressure resistance characteristics	27
10 Hydraulic characteristics	28
11 Mechanical strength characteristics	33
12 Mechanical endurance characteristics	34
12.1 Mechanical endurance characteristics of the operating mechanism	34
12.2 Mechanical endurance of diverters	39
12.3 Mechanical endurance of swivel nozzles	41
13 Acoustic characteristics	42
Annex A. for information. Recommendations for the construction of pressure take off tees.	46

1 Scope

The aim of this European Standard is to specify:

- The dimensional, watertightness, pressure resistance, hydraulic, mechanical strength, mechanical endurance and acoustic characteristics with which the single taps and mixer taps shall comply.
- The test methods to verify these characteristics.

2 Field of application

This European Standard applies to draw off taps to be fitted to sanitary appliances installed in rooms used for bodily hygiene (WC's bathrooms, etc.) and in kitchens.

It applies to sanitary draw off taps of nominal size 1/2 and PN 10 operating at the following pressure and temperature conditions.

Table 1 - Conditions of use of tapware

	Limits of use	Recommended limits for correct operation
Pressure	0,05 MPa to 1 MPa (0,5 to 10 bar)	0,1 MPa < P < 0,5 MPa (1 bar < P < 5 bar)
Temperature	Max. 90 °C	Max. 65 °C Lower limit: as for installation

The scope of this standard excludes the following: single control mixers, thermostatic mixers, jet regulators, shower accessories, waste taps, and all taps adapted for special use.

EN 200 Page 6

3 Normative references

- EN 246 1989 Sanitary tapware - General specifications for flow rate regulators.
- EN 248 1989 Sanitary tapware - General specifications for Ni-Cr Metallic surface coatings.
- ISO 228/1 1982 Pipe threads where pressure tight joints are not made on the threads
Part 1. Designation, dimensions and tolerances.
- ISO 3822/1 1983 Acoustics - Laboratory test noise emission from appliances and equipment used in water supply installations
Part 1. Method of measurement.
- ISO 3822/2 1984 Acoustics - Laboratory tests on noise emissions from appliances and equipment used in water supply installations
Part 2. Mounting and operating conditions for draw-off taps.
- ISO 3822/4 1985 Acoustics - Laboratory tests on noise emissions from appliances and equipment used in water supply installations
Part 4. Mounting and operating conditions for special appliances.
- ISO 5167 1980 Measurement of fluid flow by means of orifice plates, nozzles and venturi tubes inserted in circular cross section conduits running field.

4 Designation

The draw-off taps covered by this draft standard are designated as follows:

- Its type.
- Its nominal size $\frac{1}{2}$.
- The reference to this standard: EN 200.

Example: Combination tap with combined visible body, $\frac{1}{2}$, for mounting on horizontal surfaces, EN 200.

5 Marking - Identification

5.1 Marking

Tapware to this standard shall be marked in a permanent and indelible fashion as follows:

- on the head, with the manufacturer's name or identification;
- on the body, with the manufacturer's name or identification, its acoustic group and flow resistance class.

SIST EN 200:1996

5.2 Identification

The control devices for the taps shall be identified by:

- the colour blue for cold water;
- the colour red for hot water.

In the case of taps with separate control devices, the cold water shall be on the right and the hot water on the left.

6 Materials

6.1 Chemical and hygienic requirements

All materials coming into contact with water intended for human consumption shall not present any health risk up to a temperature of 90 °C. They shall not cause any change to the drinking water either in terms of quality, appearance, smell or taste.

EN 200 Page 8

In the recommended limits for correct operation in clause 2 the materials shall not undergo any change which would impair the performance of the tap. Parts subjected to pressure shall withstand the maximum operating pressures given in table 1. Materials without adequate resistance to corrosion shall be protected against corrosion.

6.2 Exposed surface condition

Exposed surfaces shall comply with the requirements of EN 248, for electrodeposited Ni Cr coatings

6.3 Coating quality

The coating shall comply with the requirements of EN 248, for electrodeposited Ni Cr coatings.

7 Dimensional characteristics

The design and production of the parts without dimensions in no way pre-judge the various solutions applied by the manufacturers when producing the corresponding parts.

7.1 Combination taps with concealed body for mounting on horizontal surfaces

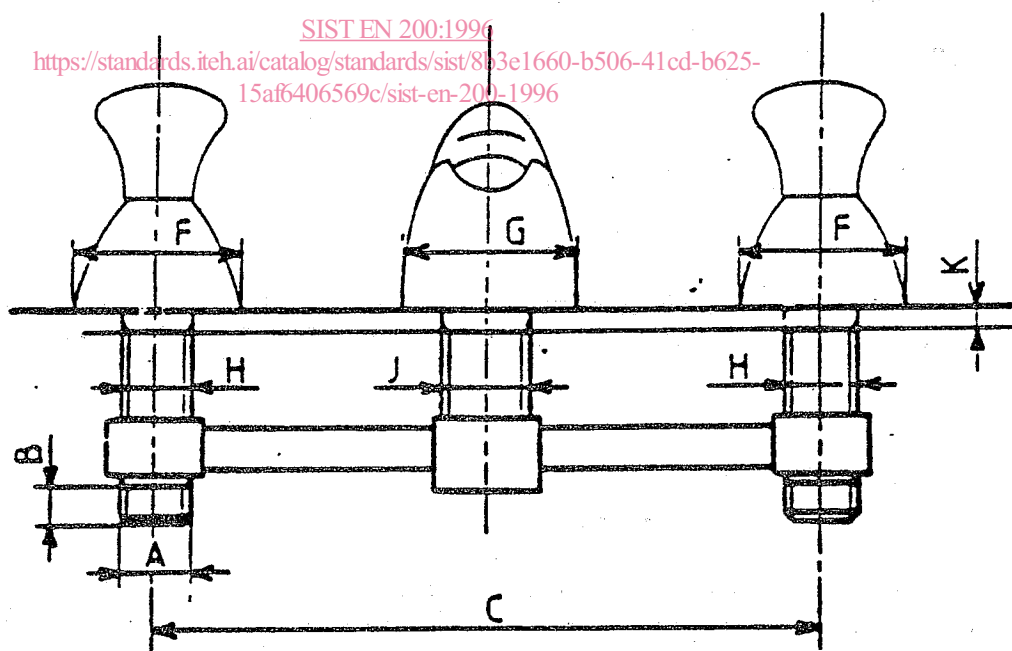


Figure 1

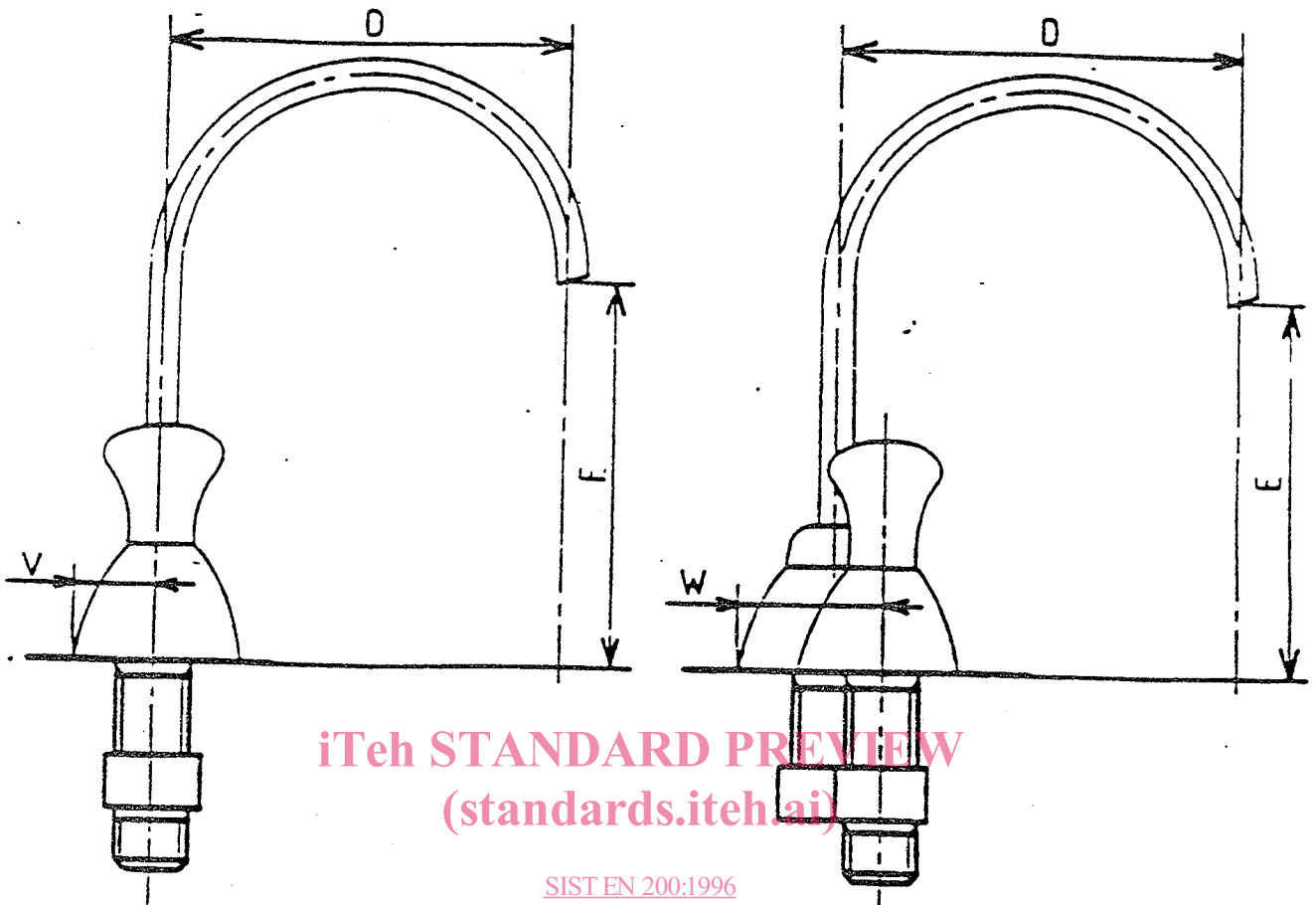


Figure 2

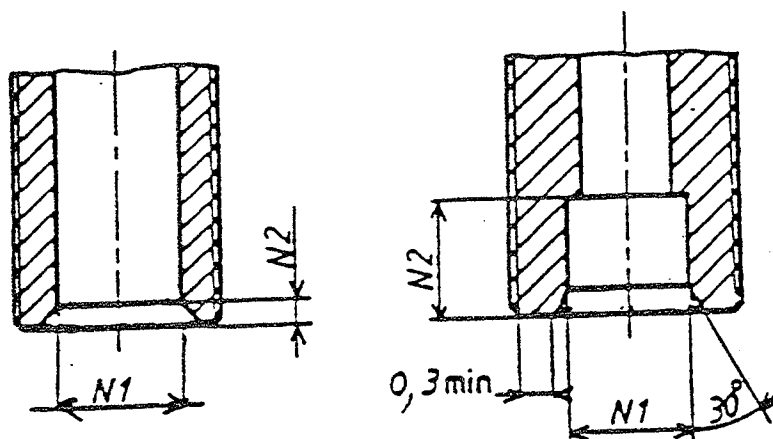
Figure 3

Table 2 - Dimensions of combination taps with concealed body for mounting on horizontal surfaces

Dimension reference	Values (mm)	Comments
A	$G\frac{1}{2}B$	ISO 228/1
B	8 min	
C (see Note)	200 ± 1 200 $\begin{smallmatrix} +10 \\ -5 \end{smallmatrix}$	In the case of fixed taps In the case of adjustable taps
D	- Fixed nozzle: 90 min - Movable nozzle: 100 min	Dimensions measured from the centre of the outlet orifice, the tap being of a type that may be fitted with or without an aerator, as appropriate
E	- Fixed nozzle: 25 min - Movable nozzle: low outlet: 25 min high outlet: 125 min	
F	42 min	Smallest dimension of the base
G	45 min	Smallest dimension of the base
G ₁	external diameter 50 max	Backnut (not shown)
E	29 max 24 max for taps with fixed centres	
J	33,5 max	
K	Value such that it allows the tap to be fixed to the appliance - with a minimum thickness of 5 mm for ceramic ware - with a minimum thickness of 1 mm for other materials	This value shall also allow for a maximum thickness of support below the body of the tap of 18 mm
V	32 max	Maximum rear projection of the base of the tap
W	47 max	
NOTE. The value of 200 mm does not apply to bidets.		

Bore for-connecting joints

The connections of certain types of taps may be provided with a bore. If a bore is provided, the dimensions shall be chosen exclusively from those given for dimension N_1 and N_2 .



Type 1

Type 2

Figure 4 - Inlet connections

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Table 3 - Inlet connections, with bore

Dimensions	Values (mm)	
	Type 1	Type 2
N_1	$12,3 + \begin{matrix} 0,2 \\ 0 \end{matrix}$	$15,2 \pm 0,05$
N_2	5 min	13 min With a chamfer of 30° and a face of 0,3 min at the entrance to the bore