

SVENSK STANDARD

SS-EN 200:2008

Fastställt/Approved: 2008-07-24

Publicerad/Published: 2008-09-18

Utgåva/Edition: 3

Språk/Language: engelska/English

ICS: 91.140.70

Sanitetsarmaturer – Mekaniska tappventiler och blandare i högtryckssystem (PN 10) – Allmänna krav

Sanitary tapware – Single taps and combination taps for water supply systems of type 1 and type 2 – General technical specification



SWEDISH
STANDARDS
INSTITUTE

Hitta rätt produkt och ett leveranssätt som passar dig

Standarder

Genom att följa gällande standard både effektiviserar och säkrar du ditt arbete. Många standarder ingår dessutom ofta i paket.

Tjänster

Abonnemang är tjänsten där vi uppdaterar dig med aktuella standarder när förändringar sker på dem du valt att abonnera på. På så sätt är du säker på att du alltid arbetar efter rätt utgåva.

e-nav är vår online-tjänst som ger dig och dina kollegor tillgång till standarder ni valt att abonnera på dygnet runt. Med e-nav kan samma standard användas av flera personer samtidigt.

Leveranssätt

Du väljer hur du vill ha dina standarder levererade. Vi kan erbjuda dig dem på papper och som pdf.

Andra produkter

Vi har böcker som underlättar arbetet att följa en standard. Med våra böcker får du ökad förståelse för hur standarder ska följas och vilka fördelar den ger dig i ditt arbete. Vi tar fram många egna publikationer och fungerar även som återförsäljare. Det gör att du hos oss kan hitta över 500 unika titlar. Vi har även tekniska rapporter, specifikationer och "workshop agreement".

Matriser är en översikt på standarder och handböcker som bör läsas tillsammans. De finns på sis.se och ger dig en bra bild över hur olika produkter hör ihop.

Standardiseringsprojekt

Du kan påverka innehållet i framtida standarder genom att delta i någon av SIS ca 400 Tekniska Kommittéer.

Find the right product and the type of delivery that suits you

Standards

By complying with current standards, you can make your work more efficient and ensure reliability. Also, several of the standards are often supplied in packages.

Services

Subscription is the service that keeps you up to date with current standards when changes occur in the ones you have chosen to subscribe to. This ensures that you are always working with the right edition.

e-nav is our online service that gives you and your colleagues access to the standards you subscribe to 24 hours a day. With e-nav, the same standards can be used by several people at once.

Type of delivery

You choose how you want your standards delivered. We can supply them both on paper and as PDF files.

Other products

We have books that facilitate standards compliance. They make it easier to understand how compliance works and how this benefits you in your operation. We produce many publications of our own, and also act as retailers. This means that we have more than 500 unique titles for you to choose from. We also have technical reports, specifications and workshop agreements.

Matrices, listed at sis.se, provide an overview of which publications belong together.

Standardisation project

You can influence the content of future standards by taking part in one or other of SIS's 400 or so Technical Committees.

Europastandarden EN 200:2008 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 200:2008.

Denna standard ersätter SS-EN 200:2005, utgåva 2.

The European Standard EN 200:2008 has the status of a Swedish Standard. This document contains the official English version of EN 200:2008.

This standard supersedes the Swedish Standard SS-EN 200:2005, edition 2.

© Copyright/Upphovsrätten till denna produkt tillhör SIS, Swedish Standards Institute, Stockholm, Sverige. Användningen av denna produkt regleras av slutanvändarlicensen som återfinns i denna produkt, se standardens sista sidor.

© Copyright SIS, Swedish Standards Institute, Stockholm, Sweden. All rights reserved. The use of this product is governed by the end-user licence for this product. You will find the licence in the end of this document.

Upplysningar om sakinnehållet i standarden lämnas av SIS, Swedish Standards Institute, telefon 08-555 520 00.

Standarder kan beställas hos SIS Förlag AB som även lämnar allmänna upplysningar om svensk och utländsk standard.

Information about the content of the standard is available from the Swedish Standards Institute (SIS), tel +46 8 555 520 00.

Standards may be ordered from SIS Förlag AB, who can also provide general information about Swedish and foreign standards.

SIS Förlag AB, SE 118 80 Stockholm, Sweden. Tel: +46 8 555 523 10. Fax: +46 8 555 523 11.

E-mail: sis.sales@sis.se Internet: www.sis.se

EUROPEAN STANDARD

EN 200

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2008

ICS 91.140.70

Supersedes EN 200:2004

English Version

Sanitary tapware - Single taps and combination taps for water supply systems of type 1 and type 2 - General technical specification

Robinetterie sanitaire - Robinets simples et mélangeurs pour les systèmes d'alimentation type 1 et type 2 - Spécifications techniques générales

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

This European Standard was approved by CEN on 15 June 2008.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents	Page
Foreword.....	5
Introduction	6
1 Scope	7
2 Normative references	11
3 Designation	11
4 Marking and identification	12
5 Materials	13
6 Dimensional characteristics	14
7 Sequence of testing.....	24
8 Leaktightness characteristics	25
9 Pressure resistance characteristics - mechanical performance under pressure.....	31
10 Hydraulic characteristics	33
11 Mechanical strength characteristics - torsion test for operating mechanism	36
12 Mechanical endurance characteristics.....	37
13 Backflow protection.....	45
14 Acoustic characteristics	45
Annex A (informative) Pressure take-off tee.....	47
Bibliography	51

Figure	Page
Figure 1 - Supply system of Type 1 with a pressure range of (0,05 to 1,0) MPa [(0,5 to 10) bar]	9
Figure 2 - Supply system of Type 2 with a pressure range of (0,01 to 1,0) MPa [(0,1 to 10) bar]	10
Figure 3 - Bib taps $\frac{1}{2}$ and $\frac{3}{4}$ - Single-hole taps $\frac{1}{2}$.....	16
Figure 4 - Multi-hole combination taps.....	17
Figure 5 - Supply connections for taps and remote outlets.....	17
Figure 6 - Pillar and bib taps.....	20
Figure 7 - Remote outlet.....	21
Figure 8 - Single hole combination tap	21
Figure 9 - Bath/shower combination tap	21
Figure 10 - Single hole combination tap	23
Figure 11 - Two hole combination tap (fixed centres)	23
Figure 12 - Three hole combination tap (adjustable centres)	24
Figure 13 - Apparatus for testing the leaktightness of automatic diverters for taps for supply system of Type 2	31
Figure 14 - Flow rate test apparatus for taps for Type 2 supply systems	35
Figure 15 - Life test –closing torque vs time	40
Figure 16 - Endurance test rig for divided-outlet swivel spout.....	45
Figure A.1 - Pressure take-off tee (test rig Type 1 taps).....	47
Figure A.2 - Schematic examples of pressure take-off tees (test rig Type 1 taps).....	49

Table	Page
Table 1 - Conditions of use/Classifications	8
Table 2 - Performance characteristics to be noted if used outside the recommended operating range..	8
Table 3 - Designation.....	12
Table 4 - Inlet dimensions (Pillar & bib taps, single- & multi-hole combination taps)	15
Table 5 - Outlet dimensions (Remote outlets, pillar taps, bib taps, single- and multi-hole combination taps)	19
Table 6 - Mounting dimensions (Pillar taps, single- and multi-hole combination taps).....	22
Table 7 - Test Sequence	25
Table 8 - Summary of tightness tests	30
Table 9 - Summary of pressure resistance characteristic tests	33
Table 10 - Minimum flow rates and test pressures according to application.....	36
Table 11 - Endurance Test conditions	39
Table 12 - Summary of test conditions for diverters.....	42
Table 13 - Flow rate classes (EN ISO 3822-4:1997, Annex A)	46
Table 14 - Acoustic group	46
Table A.1 - Dimensions of the pressure take-off tee.....	48

Foreword

This document (EN 200:2008) 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 January 2009, and conflicting national standards shall be withdrawn at the latest by January 2009.

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 200:2004.

This document acknowledges the field of application of tapware used in:

- water supply systems of Type 1 (see Figure 1 and Table 1) with a pressure range of 0,05 MPa (0,5 bar) to 1,0 MPa (10 bar);
- water supply systems of Type 2 (see Figure 2 and Table 1) with a pressure range of 0,01 MPa (0,1 bar) to 1,0 MPa (10 bar) – which combines mains-fed and cistern-fed water supply systems.

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 European Standard.

This European Standard provides no information as to whether the product can 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.

This document identifies characteristics and technical requirements for single and combination taps.

1 Scope

This European Standard specifies:

- a) the field of application for pillar taps, bib taps, single and multi-hole combination taps for use in:
 - 1) a supply system of Type 1 (see Figure 1);
 - 2) a supply system of Type 2 (see Figure 2);
- b) the dimensional, leaktightness, pressure resistance, hydraulic performance, mechanical strength, endurance and acoustic characteristics of nominal size $\frac{1}{2}$ and $\frac{3}{4}$ single taps and combination taps;
- c) test methods to verify the characteristics.

The tests described in this European Standard are type tests (laboratory tests) and not quality control tests carried out during manufacture.

This European Standard applies to draw-off taps (single taps and combination taps) for use with sanitary appliances installed in rooms used for bodily hygiene (cloakrooms, bathrooms etc.) and in kitchens, i.e. for use with baths, wash basins, bidets, showers and sinks.

Figure 1 shows a supply system of Type 1 with a pressure range of (0,05 to 1,0) Mpa [(0,5 to 10) bar].

Figure 2 shows a supply system of Type 2 with a pressure range of (0,01 to 1,0) Mpa [(0,1 to 10) bar].

This European Standard applies to sanitary draw-off taps of nominal size $\frac{1}{2}$ and $\frac{3}{4}$ (PN 10).

The conditions of use and classifications are given in Table 1. The Table 2 gives the performance characteristics to be noted if the tap is used outside the recommended operating range.