



SLOVENSKI STANDARD
SIST EN 246:2004

01-maj-2004

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SIST EN 246:1995

Sanitarne armature - Splošne specifikacije za regulatorje pretoka

Sanitary tapware - General specifications for flow rate regulators

Sanitärarmaturen - Allgemeine Anforderungen an Strahlregler

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Robinetterie sanitaire - Spécifications générales des régulateurs de jets

[SIST EN 246:2004](#)

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Ta slovenski standard je istoveten z: EN 246:2003

ICS:

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Sanitarne naprave

Sanitary installations

SIST EN 246:2004

en

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English version

Sanitary tapware - General specifications for flow rate regulators

Robinetterie sanitaire - Spécifications générales des
régulateurs de jets

Sanitärarmaturen - Allgemeine Anforderungen an
Strahlregler

This European Standard was approved by CEN on 16 July 2003.

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 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 Management Centre has the same status as the official versions.

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

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

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Foreword

This document (EN 246:2003) 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 February 2004, and conflicting national standards shall be withdrawn at the latest by February 2004.

This document supersedes EN 246:1989.

In respect to potential adverse effects on the quality of water intended for human consumption, caused by the product covered by this standard, 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.

Annex A is normative.

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

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1 Scope

This European Standard specifies:

- the dimensional, mechanical, hydraulic and acoustic characteristics with which flow rate regulators should comply;
- the procedures for testing these characteristics.

This European Standard is applicable to:

- flow rate regulators intended to be mounted on tapware used with sanitary appliances in toilets, washrooms and kitchens (single taps, combination tap assemblies, mechanical mixing valves, thermostatic mixing valves);
- flow rate regulators used under the following pressure and temperature conditions:

Table 1 – Conditions for the use of flow rate regulators

	Limits of use	Recommended limits for correct operation
Dynamic Pressure	0,05 MPa ≤ P ≤ 0,5 MPa (0,5 bar ≤ P ≤ 5 bar)	0,1 MPa ≤ P ≤ 0,5 MPa (1 bar ≤ P ≤ 5 bar)
Temperature	≤ 70 °C	≤ 65 °C

Flow rate regulators can only be connected downstream of the obturator of the tap.

2 Normative references

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This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 248, *Sanitary tapware – General specifications for electrodeposited coatings of Ni-Cr.*

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 3822-4:1997).*

ISO 49, *Malleable cast iron fittings threaded to ISO 7-1.*

3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply:

flow rate regulator

A device which is fitted on the nozzle outlet of a tap to enable its jet to be regulated

A distinction is made between:

- flow rate regulators without air intake, when operating without aeration of the water;
- flow rate regulators with air intake, when aeration of the water occurs;
- ball joint flow rate regulators, when a flow rate regulator with or without aeration is fitted into a ball joint.

4 Designation

A flow rate regulator is designated by:

- its type ; (with/without air intake)
- its dimension (Q);
- its acoustic group (I) and flow rate class (A);
- reference to this standard.

Example of designation :

Flow rate regulator without air intake, with internal thread : M22X1; I; A – EN 246 (cf. Figure 1 and Table 2)

Flow rate regulator without air intake, with external thread : M28X1; I; A – EN 246 (cf. Figure 2 and Table 1)

5 Marking – Identification

Flow rate regulators complying with this standard shall be marked permanently and visible on their outer face with:

- the mark or name of the manufacturer;
- the acoustic group and the flow rate class.

The flow rate class shall be marked on the outer face of the skirt of the grille cage, if it is an interchangeable type detachable changer

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In order to distinguish flow rate regulators with air intake from flow rate regulators without air intake they shall also be marked with an X on the exterior surface.

Ball joint flow rate regulator shall be marked both on the ball joint device and on the flow rate regulator.

6 Materials

6.1 Chemical and hygienic characteristics

All materials coming into contact with water intended for human consumption shall present no health risk up to a temperature of 90 °C. They shall not cause any deterioration in water intended for human consumption, with regard to food quality, appearance, odour or taste.

Within the recommended limits given in clause 1 for correct operation, the materials shall not be subject to any deterioration which might affect the operation of the flow rate regulator. Pressurized parts shall withstand the limits of use specified in Table 1. Materials with inadequate corrosion resistance shall be given additional protection.

6.2 Exposed surface condition and quality of coating

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

7 Dimensions

NOTE For values without specified tolerances the tolerances of EN 22768-1 are applicable.

7.1 Flow rate regulators with internal thread

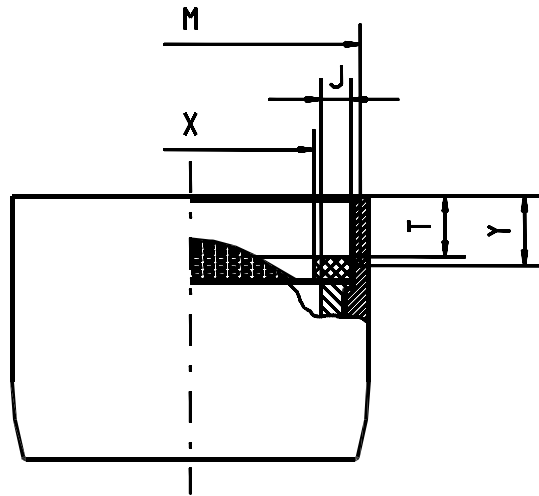
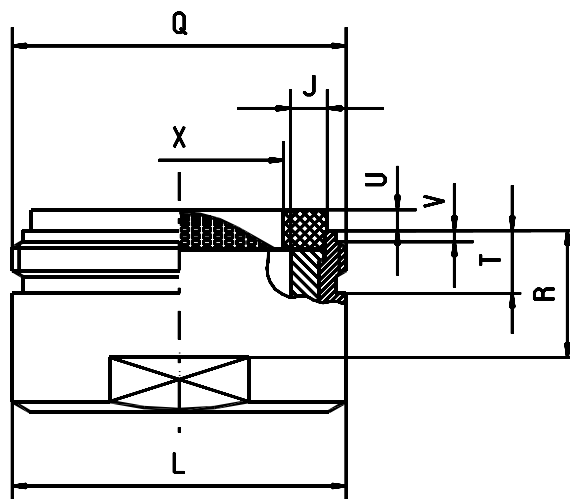


Figure 1 – Flow rate regulators with internal thread

Table 2 – Dimensions for flow rate regulator with internal thread

Symbol	Values (mm)
M	M22X1 – 6H
X	14 to 17
T	3,5 to 4,3
Y	min 4,5
J	min 2

7.2 Flow rate regulators with external thread



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Figure 2 – Flow rate regulators with external thread

Table 3 – Dimensions for flow rate regulators with external thread

Symbol	Values (mm)	
Q	M24X1 – 6g	M28X1 – 6g
X	14 to 17	15 to 19
T	4,5 ± 0,1	7 ± 0,1
R	Min. 9	Min. 14
U	1 + 0,5 / 0	1 + 0,5 / 0
L	24 0/-0,2	28 0/-0,2
V	0,8	0,8
J	Min. 2	Min. 2,5

7.3 Ball joint flow rate regulators

The connections ball joint to tapware and ball joint to flow rate regulator shall each comply with the requirements of either Table 2 or Table 3.

There are two types of ball joint flow rate regulators: