

Building valves - Frost resistant taps for outdoor use
(FRT) - General technical specification

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

Building valves - Frost resistant taps for outdoor use (FRT) - General technical specification

Robinets résistant au gel pour une utilisation en
extérieur - Spécifications techniques générales

Frostbeständige Außenarmaturen für den
Außenbereich - Allgemeine technische Spezifikation

This European Standard was approved by CEN on 28 May 2023.

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European foreword

This document (EN 17821:2023) 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of an identical text or by endorsement, at the latest by January 2024, and conflicting national standards shall be withdrawn at the latest by January 2024.

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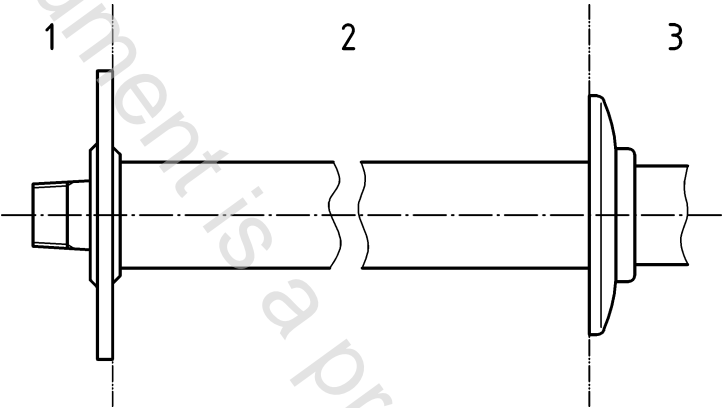
1 Scope

This document specifies:

- general construction, performance and material requirements for Frost Resistant Taps for outdoor use (FRT), PN 10.
- the application in the potable water installation with a static pressure of maximum 1,0 MPa (10 bar) and a distribution temperature of maximum 25 °C (PWC).

FRT valves shall consist of the 3 areas shown in Figure 1.

The conditions of use are according to the following Table 1.



- Key**
- 1 indoor area
 - 2 area in the wall
 - 3 outdoor area

Figure 1 — The different areas of FRT

Table 1 — Conditions of use

Supply	Dimension	Operating Range	
Pressure	DN 15 to DN 20	recommended	limits
Pressure static — max.		≤ 1,0 MPa (10,0 bar)	
Pressure dynamic		0,1 to 0,5 MPa (1 to 5 bar)	≥ 0,05 MPa (0,5 bar)
Temperature cold — PWC		≤ 25 °C	

The requirements with regard to the potable water quality are specified in national regulations.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 248:2002, *Sanitary tapware - General specification for electrodeposited coatings of Ni-Cr*

EN 1254 (all parts), *Copper and copper alloys - Plumbing fittings*

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

EN ISO 3822 (all parts), *Acoustics - Laboratory tests on noise emission from appliances and equipment used in water supply installations (ISO 3822 (all parts))*

EN ISO 6509-1, *Corrosion of metals and alloys - Determination of dezincification resistance of copper alloys with zinc - Part 1: Test method (ISO 6509-1)*

EN ISO 9227, *Corrosion tests in artificial atmospheres - Salt spray tests (ISO 9227)*

ISO 228-1, *Pipe threads where pressure-tight joints are not made on the threads — Part 1: Dimensions, tolerances and designation*

ISO 7-1, *Pipe threads where pressure-tight joints are made on the threads — Part 1: Dimensions, tolerances and designation*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1717 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

3.1

FRT

frost resistant tap for outdoor use defined by:

- method of achieving frost resistance (for example by drainage or by controlled expansion);
- pre-assembled or assembled on-site;
- fix and adjustable length;
- one or two outlets (shall be safe for every outlet)

3.2

PWC

potable water cold

Note 1 to entry: The temperature is not higher than 25 °C according to the European Potable Water Directive.