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English Version

Sanitary tapware - Mechanical mixing valves (PN 10) - General technical specifications

Robinetterie sanitaire - Mitigeurs mécaniques (PN 10) - Spécifications techniques générales

Sanitärarmaturen - Mechanisch einstellbare Mischer (PN 10) - Allgemeine technische Spezifikation

This draft European Standard is submitted to CEN members for formal vote. It has been drawn up by the Technical Committee CEN/TC 164.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (FprEN 817:2024) has been prepared by Technical Committee CEN/TC 164 “Water supply”, the secretariat of which is held by AFNOR.

This document is currently submitted to the CEN Formal Vote.

This document will supersede EN 817:2008.

In comparison with the previous edition, the following technical modifications have been made:

— all test of hydraulic performance, acoustic characteristics and leaktightness have been completely revised;

— new endurance test for single sequential control devices has been created;

— figures, tables and dimensions have been revised;

— normative references have been updated.

This document acknowledges the field of application for mechanical mixing valves used in water supply systems of type 1 (see Figure 1 and Table 1) with a pressure range of (0,05 to 1,0) MPa [(0,5 to 10) bar].

Introduction

In respect of potential adverse effects on the quality of water intended for human consumption caused by the product covered by this document, this document provides no information as to whether the product can be used without restriction in any of the Member States of the EU or EFTA.

NOTE Attention is drawn existing national regulations that might apply concerning the use and/or the characteristics of these products.

This document identifies characteristics and technical requirements for mechanical mixing valves.

1 Scope

This document specifies:

a) the field of application for mechanical mixing valves for use in a supply system of Type 1 (see Figure 1);

b) the dimensional, leaktightness, pressure resistance, hydraulic performance, mechanical strength, endurance, corrosion resistance of the surface of the product, sequence of testing and acoustic characteristics with which sanitary tapware products including their components (flexible hose, pull out spray) need to comply where applicable;

c) test methods to verify the characteristics.

The tests described in this document are type tests (laboratory tests) and not quality control or factory production control (FPC) tests carried out during manufacture.

This document applies to draw-off taps (mechanical mixing valves) for use with sanitary appliances installed in rooms used for personal hygiene (cloakrooms, bathrooms, etc.) and for food preparation (kitchens), i.e. for use with baths, wash basins, bidets, showers and sinks.

The conditions of use and classifications are given in Table 1.

Table 1 — Conditions of use

Water Supply System	**Operating Range of Taps**	
	Limits	**Recommended[a]**
Type 1 see Figure 1	Dynamic Pressure ≥ 0,05 MPa (0,5 bar) Static Pressure ≤ 1,0 MPa (10,0 bar)	Dynamic Pressure (0,1 to 0,5) MPa [(1,0 to 5,0) bar]
Temperature	≤ 70 °C	≤ 65 °C
[a] Measured at the point of discharge		

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].