

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

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Contents	Page
European foreword	5
Introduction	6
1 Scope.....	7
2 Normative references.....	8
3 Terms and definitions	9
4 Designation	11
5 Marking and identification.....	12
5.1 Marking	12
5.2 Identification	12
6 Materials	13
6.1 Chemical and hygiene requirements.....	13
6.2 Exposed surface condition and quality of coating	13
7 Backflow protection.....	13
8 Sequence of testing.....	13
9 Dimensional characteristics	13
9.1 General remarks	13
9.2 Inlet dimensions.....	14
9.3 Outlet dimensions.....	15
9.4 Mounting dimensions.....	18
9.5 Special cases	19
10 Leaktightness characteristics.....	19
10.1 Principle	19
10.2 Apparatus	20
10.3 Leaktightness of the obturator and of the tap upstream of the obturator(s) with the obturator in the closed position.....	20
10.4 Leaktightness downstream of the obturator	20
10.5 Leaktightness of manually operated diverters.....	21
10.6 Leaktightness and operation of diverters with automatic return (and semi- automatic type diverters)	22
10.7 Cross flow between inlets	23
11 Pressure resistance.....	24
11.1 Principle	24
11.2 Apparatus	24
11.3 Mechanical behaviour upstream of the obturator – obturator in the closed position	24
11.4 Mechanical behaviour downstream of the obturator – obturator in the open position.....	25
12 Hydraulic Performance	25
12.1 General.....	25
12.2 Initial setting	26
12.3 Determination of flow rate	26
12.4 Determination of sensitivity	27
13 Mechanical strength/torsional resistance.....	29

13.1	Principle.....	29
13.2	Apparatus	29
13.3	Procedure	29
13.4	Requirements.....	30
14	Mechanical endurance	30
14.1	General	30
14.2	Endurance test of conventional control devices	30
14.3	Endurance test of joystick control devices.....	32
14.4	Endurance test of Single sequential control devices	34
14.5	Endurance test of separate controls	36
14.6	Endurance test of diverter mechanisms	38
14.7	Endurance test for swivel spouts.....	40
15	Acoustic characteristics	41
15.1	General	41
15.2	Procedure	42
15.3	Expression of results	42
	Annex A (normative) Apparatus.....	44
A.1	General	44
A.2	Supply circuits	44
A.3	Test circuit	45
A.4	Pressure take off tees.....	47
A.5	Mounting of the mixing valve.....	47
	Annex B (informative) Pressure take-off tee.....	48
	Annex C (informative) Recommended flow rates	51
	Annex D (informative) Product components (detailed by other standards).....	52
	Bibliography	53

Figures

Figure 1	— Supply system of Type 1 with a pressure range of (0,05 to 1,0) MPa [(0,5 to 10) bar].....	8
Figure 2	— single hole taps.....	15
Figure 3	— Multi hole taps.....	15
Figure 4	— Remote outlet	16
Figure 5	— Single hole/remote outlet	17
Figure 6	— Bath/shower /remote outlet.....	17
Figure 7	— Single hole taps	19
Figure 8	— Clamping Arrangement for use with ceramic sanitaryware.....	19
Figure 9	— Sensitivity curve	28
Figure 10	— Radius (r) for the determination of sensitivity.....	29
Figure 11	— Rectangular movement (One cycle 0 to 11).....	31
Figure 12	— Test bench adjustment torque for conventional mixing valve.....	32
Figure 13	— Triangular movement (One cycle 0 to 8).....	33
Figure 14	— Test bench adjustment torque for joystick mixing valve.....	34
Figure 15	— linear movement (One cycle 0 to 6)	35
Figure 16	— Test bench adjustment torque for single sequential mixing valve.....	36
Figure A.1	— Supply circuits.....	44
Figure A.2	— Test circuit.....	46

Figure A.3 — Mounting of the mixing valve	47
Figure B.1 — Pressure take-off tee (test rig Type 1 taps)	48
Figure B.2 — Schematic examples of pressure take-off tees (test rig Type 1 taps)	49

Tables

Table 1 — Conditions of use	7
Table 2 — Designation index	11
Table 3 — Sequence of testing	13
Table 4 — Inlet dimensions sanitary tapware	14
Table 5 — Outlet dimensions	16
Table 6 — Mounting dimensions<Tbl_-></Tbl_->	18
Table 7 — Informative summary of leaktightness tests	23
Table 8 — Informative summary of pressure resistance tests	25
Table 9 — Initial settings	26
Table 10 — Performance levels	28
Table 11 — Summary of test conditions for cartridges	38
Table 12 — Summary of test conditions for diverters	40
Table 13 — Summary of test conditions for swivel spout	41
Table 14 — Acoustic group	42
Table 15 — Flow rate classes (EN ISO 3822-4:1997, Annex A)	43
Table A.1 — Connecting dimensions	46
Table B.1 — Dimensions of the pressure take-off tee	48
Table C.1 — Recommended flow rates	51

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	<u>Dynamic Pressure</u> $\geq 0,05 \text{ MPa}$ $(0,5 \text{ bar})$ <u>Static Pressure</u> $\leq 1,0 \text{ MPa}$ $(10,0 \text{ bar})$	<u>Dynamic Pressure</u> $(0,1 \text{ to } 0,5) \text{ MPa}$ $[(1,0 \text{ to } 5,0) \text{ bar}]$
Temperature	$\leq 70 \text{ }^{\circ}\text{C}$	$\leq 65 \text{ }^{\circ}\text{C}$
^a Measured at the point of discharge		

Figure 1 shows a supply system of Type 1 with a pressure range of $(0,05 \text{ to } 1,0) \text{ MPa}$ $[(0,5 \text{ to } 10) \text{ bar}]$.