



BSI Standards Publication

Sanitary tapware — Thermostatic mixing valves (PN 10) — General technical specification

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National foreword

This British Standard is the UK implementation of EN 1111:2026. It supersedes BS EN 1111:2017, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/504/-/8, Sanitary tapware.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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- Allgemeine technische Spezifikation

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Contents	Page
European foreword.....	6
Introduction	7
1 Scope.....	8
2 Normative references.....	8
3 Terms and definitions	9
4 Symbols and units	10
5 Classification.....	11
6 Designation.....	11
7 Marking/identification	12
7.1 Marking.....	12
7.2 Identification	12
8 Materials.....	12
8.1 Chemical and hygiene requirements	12
8.2 Exposed surface condition and quality of coating.....	12
9 Dimensional characteristics.....	12
9.1 General remarks.....	12
9.2 Inlet dimensions.....	13
9.3 Outlet dimensions.....	15
9.4 Mounting dimensions	17
9.5 Special cases.....	20
9.6 Flexible hoses for outlet 2	20
9.7 Outlet 2.....	20
10 Backflow protection.....	20
11 Test sequence	21
12 Leaktightness.....	21
12.1 General.....	21
12.1.1 Principle	21
12.1.2 Apparatus.....	21
12.2 Leaktightness of the obturator and upstream thereof	21
12.2.1 General.....	21
12.2.2 Procedure.....	21
12.2.3 Requirements	22
12.3 Cross-flow between inlets	22
12.3.1 General.....	22
12.3.2 Procedure.....	22
12.3.3 Requirements	22
12.4 Leaktightness downstream of the obturator	22
12.4.1 General.....	22
12.4.2 Procedure.....	22
12.4.3 Requirements	22
12.5 Leaktightness of manually operated diverter	22
12.5.1 Procedure.....	22

This is a preview of BS EN 1111:2026. [Click here to purchase the full version from the ANSI store.](#)

12.5.2 Requirement.....	23
12.6 Leaktightness of diverters with automatic return	23
12.6.1 Procedure	23
12.6.2 Requirement.....	23
13 Performance	23
13.1 General	23
13.1.1 Initial settings	23
13.1.2 Apparatus	24
13.1.3 Procedure	24
13.2 Determination of flow rate.....	25
13.2.1 Principle.....	25
13.2.2 Procedure	25
13.2.3 Evaluation of the results	26
13.2.4 Requirements.....	26
13.3 Sensitivity	26
13.3.1 General	26
13.3.2 Principle.....	26
13.3.3 Procedure	26
13.3.4 Evaluation of results.....	27
13.3.5 Requirements.....	27
13.4 Fidelity.....	28
13.4.1 General	28
13.4.2 Principle.....	28
13.4.3 Procedure	28
13.4.4 Evaluation of results.....	28
13.4.5 Requirements.....	28
13.5 Temperature stability.....	29
13.5.1 Temperature control operation.....	29
13.5.2 Flow rate reduction.....	30
13.5.3 Cold supply failure and restoration	31
13.5.4 Supply pressure variation	32
13.5.5 Supply temperature variation	33
13.5.6 Temperature override stops	35
14 Pressure resistance.....	36
14.1 General	36
14.2 Apparatus	36
14.3 Testing of mechanical performance of the thermostatic mixing valve upstream of the obturator in the closed position.....	36
14.3.1 Procedure	36
14.3.2 Requirement.....	36
14.4 Mechanical behaviour downstream of the obturator – Obturator in the open position	36
14.4.1 Procedure	36
14.4.2 Requirement.....	36
15 Torsional resistance of the operating controls.....	37
15.1 General	37
15.2 Test method.....	37
15.2.1 Principle.....	37
15.2.2 Apparatus	37
15.2.3 Procedure	37
16 Mechanical endurance characteristics	37
16.1 General	37

This is a preview of BS EN 1111:2026. [Click here to purchase the full version from the ANSI store.](#)

16.2	Endurance test for single sequential control device	38
16.2.1	Principle	38
16.2.2	Apparatus.....	38
16.2.3	Procedure.....	38
16.2.4	Requirement.....	38
16.3	Endurance test for on/off flow control device operated by rotating the control handle	39
16.3.1	Principle	39
16.3.2	General.....	39
16.4	Endurance test for on/off flow control device, combined with diverter mechanism	39
16.4.1	Principle	39
16.4.2	Apparatus.....	39
16.4.3	Procedure.....	39
16.4.4	Requirement.....	40
16.5	Endurance test for other on-off flow control device	40
16.5.1	Principle	40
16.5.2	Apparatus.....	40
16.5.3	Procedure.....	40
16.5.4	Requirement.....	40
16.6	Mechanical endurance of diverters of thermostatic mixing valves	40
16.6.1	General.....	40
16.6.2	Test method	41
16.6.3	Requirements.....	42
16.7	Mechanical endurance of swivel spouts	42
16.7.1	General.....	42
16.7.2	Test method	42
16.7.3	Requirements.....	42
16.8	Thermal Element.....	43
16.8.1	Principle	43
16.8.2	Temperature adjustable valves (Type 1, 2, 4)	43
16.8.3	Temperature set valves (Type 5)	43
16.8.4	Other valves with special control devices (Type 6).....	44
17	Acoustic characteristics.....	44
17.1	General.....	44
17.2	Procedure.....	44
17.2.1	Fitting and operating conditions for thermostatic mixing valves	44
17.2.2	Test method	44
17.3	Requirements.....	45
17.3.1	Expression of results.....	45
17.3.2	Determination of acoustic groups.....	45
17.3.3	Flow rate classes (thermostatic mixing valves Type 1, 2, 3)	45
Annex A (normative)	Test set-up descriptions.....	46
A.1	General.....	46
A.2	Inlet pipework.....	46
A.2.1	Thermostat endurance.....	46
A.2.2	Performance	47
A.3	Outlet pipework.....	47
A.3.1	General.....	47
A.3.2	Outlet for valves without integral atmospheric discharge spouts	48

This is a preview of BS EN 1111:2026. [Click here to purchase the full version from the ANSI store.](#)

A.3.3 Outlet for valves with atmospheric discharge nozzles	51
Annex B (informative) Measurements.....	52
B.1 Pressure	52
B.2 Flow	52
B.3 Temperature	52
B.3.1 Mounting.....	52
B.3.2 Accuracy.....	52
B.3.3 Response time.....	52
B.4 Angular position.....	52
B.5 Duration of transients.....	52
Annex C (informative) Temperature transient.....	55
C.1 Positive temperature transient.....	55
C.2 Negative temperature transient.....	56
Annex D (informative) Acoustic classification (example).....	57
D.1 TMV with nozzle	57
D.2 TMV with shower or shower head outlet.....	57
D.3 TMV with nozzle and shower or shower head outlet	57
Bibliography	59

This is a preview of BS EN 1111:2026. [Click here to purchase the full version from the ANSI store.](#)

European foreword

This document (EN 1111:2026) 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 September 2026, and conflicting national standards shall be withdrawn at the latest by September 2026.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 1111:2017.

EN 1111:2026 includes the following significant technical changes with respect to EN 1111:2017:

- to Clause 13 clarifications of the requirements with new figures being introduced;
- the standard was revised editorially.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

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Introduction

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

NOTE While awaiting the adoption of verifiable European criteria, attention is also drawn to national regulations that can apply.

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1 Scope

This document specifies general construction, performance and material requirements for PN 10 thermostatic mixing valves (TMV) and includes test methods for the verification of mixed water temperature performance at the point of use below 45 °C. This does not exclude the selection of higher temperatures where available. When these devices are used to provide anti-scald protection for children, elderly and disabled persons, the mixed water temperature needs to be set at a suitable temperature (body temperature approximately 38 °C). In particular children are at risk to scalding at lower temperatures than adults. This does not obviate the need for supervision of young children.

It applies to valves intended for use on sanitary appliances in kitchens, washrooms (incl. all rooms with sanitary tapware, e.g. toilets and cloakrooms) and bath rooms operating under the conditions specified in Table 1.

This document allows TMVs to supply a single outlet or a small number of outlets in a “domestic” application (e.g. one valve controlling a shower, bath, basin and/or bidet), excluding valves specifically designed for supplying a large number of outlets (i.e. for institutional use).

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

Table 1 — Conditions of use

Supply	Operating range	
	limits	recommended
Pressure		
-Static	$\leq 1 \text{ MPa } [\leq 10 \text{ bar}]$	
-Dynamic	$\geq 0,05 \text{ MPa } [\geq 0,5 \text{ bar}]$	$(0,1 \text{ to } 0,5) \text{ MPa } [(1 \text{ to } 5) \text{ bar}]$
Temperature		
-Hot	$\leq 70 \text{ }^{\circ}\text{C}$	$\leq 65 \text{ }^{\circ}\text{C}$
-Cold	$\leq 25 \text{ }^{\circ}\text{C}$	—

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 200, *Sanitary tapware — Single taps and combination taps for water supply systems of type 1 and type 2 — General technical specification*

EN 246, *Sanitary tapware — General specifications for aerators*

EN 248, *Sanitary tapware — General specification for electrodeposited coatings of Ni-Cr*

EN 1057, *Copper and copper alloys — Seamless, round copper tubes for water and gas in sanitary and heating applications*

EN 1112, *Sanitary tapware — Shower outlets for sanitary tapware for water supply systems of type 1 and type 2 — General technical specification*