

STN	Armatúry v budovách Expanzné ventily Skúšky a požiadavky	STN EN 1491 13 5804
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Building valves - Expansion valves - Tests and requirements

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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**Building valves - Expansion valves - Tests and
requirements**

Robinetterie de bâtiment - Soupapes d'expansion -
Essais et exigences

Gebäudearmaturen - Sicherheitsventile für
Expansionswasser - Prüfungen und Anforderungen

This European Standard was approved by CEN on 13 June 2022.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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EN 1491:2022 (E)**European foreword**

This document (EN 1491:2022) 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of an identical text or by endorsement, at the latest by January 2023, and conflicting national standards shall be withdrawn at the latest by January 2023.

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 1491:2000.

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

- chapter on materials was completely revised;
- testing with disinfectant was introduced;
- torque test was added;
- testing of the expansion valve was changed and optimized;
- coating test procedure was revised;
- normative references were updated;
- editorial changes have been made throughout the entire document.

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, Turkey and the United Kingdom.

Introduction

With regard to potential adverse effect on the quality of water intended for human consumption, caused by the product covered by this document:

- 1) This document provides no information as to whether the product may be used without restriction in any of the Member States of the EU or EFTA.
- 2) It should be noted that, whilst awaiting the adoption of verifiable European criteria, existing national regulations concerning the use and or the characteristics of this product remain in force.

EN 1491:2022 (E)**1 Scope**

This document specifies dimensions, materials and performance requirements (including methods of test) for expansion valves, of nominal sizes from DN 15 to DN 32, having working pressures¹⁾ from 0,1 MPa (1 bar) to 1,0 MPa (10 bar).

Expansion valves are intended for fitting to the cold potable water supply of storage water heaters, having a maximum distribution temperature of 95 °C, for all energy sources.

Expansion valves do not control the temperature and alone do not constitute the protection required for storage water heaters. Expansion valves limit pressure, in the water heaters to what they are fitted, that is produced by thermal expansion of the water.

NOTE The use of the device specified in this document does not override the need to use controls (e.g. thermostats and cut-outs) which act directly on the power sources of water heaters (for more information see Annex A).

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 806 (all parts), *Specifications for installations inside buildings conveying water for human consumption*

EN 1254-2, *Copper and copper alloys - Plumbing fittings - Part 2: Compression fittings for use with copper tubes*

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

EN 10226-1, *Pipe threads where pressure tight joints are made on the threads - Part 1: Taper external threads and parallel internal threads - Dimensions, tolerances and designation*

EN ISO 6509 (all parts), *Corrosion of metals and alloys - Determination of dezincification resistance of brass (ISO 6509)*

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

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

ISO 6957, *Copper alloys — Ammonia test for stress corrosion resistance*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN

¹ All pressures are gauge unless otherwise stated.