



National Standards Authority of Ireland

IRISH STANDARD

**I.S. EN 1488:2000**

ICS 91.140.60

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## **BUILDING VALVES - EXPANSION GROUPS - TESTS AND REQUIREMENTS**

*This Irish Standard was  
published under the  
authority of the National  
Standards Authority of  
Ireland  
and comes into effect on:  
June 23, 2000*

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 1488**

March 2000

ICS 91.140.60

English version

## Building valves - Expansion groups - Tests and requirements

Robinetterie de bâtiment - Groupes d'expansion - Essais et prescriptions

Gebäudearmaturen - Sicherheitsgruppen für Expansionswasser - Prüfungen und Anforderungen

This European Standard was approved by CEN on 3 February 2000.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## **FOREWORD**

This European Standard 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of an identical text or by endorsement, at the latest by September 2000, and conflicting national standards shall be withdrawn at the latest by September 2000.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

The product standards on check valves are currently being worked out within CEN/TC 164/WG 4. The requirements for the endurance tests that will be laid down for these products may cause the revision of the present standard for reasons of homogeneity.

## **INTRODUCTION**

In respect of potential adverse effect on the quality of water intended for human consumption, caused by the product covered by this standard:

- 1) This standard 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.

## 1 SCOPE

This European Standard specifies, dimensions, materials and performance requirements (including methods of test) for expansion groups, of nominal sizes from DN 15 to DN 40, having working pressures<sup>1)</sup> from 0,1 MPa (1 bar) to 1,0 MPa (10 bar).

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

Expansion groups limit pressure, in the water heater to which they are fitted, that is produced by thermal expansion of the water.

Expansion groups do not control temperature and alone do not constitute the protection required for storage water heaters.

NOTE : The use of the device specified in this Standard does not override the need to use controls (eg thermostats and thermal cut-outs) which act directly on the power sources of water heaters.

## 2 NORMATIVE REFERENCES

This European Standard incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest addition of the publication referred to applies.

EN 1254-2	Copper and copper alloy - Plumbing fittings - Part 2: Fittings with compression ends for use with copper tube.
EN 1982	Copper and copper alloys - Ingots and castings
EN 12420	Copper and copper alloys - Forgings
EN ISO 3822-1	Acoustics - Laboratory tests on noise emission from appliances and equipment used in water supply installations - Part 1: Method of Measurement (ISO 3822-1 : 1999).
EN ISO 3822-3:1997	Acoustics - Laboratory tests on noise emission from appliances and equipment used in water supply installations - Part 3: Mounting and operating conditions for in-line valves and appliances (ISO 3822-3:1997).
EN ISO 6509	Corrosion of metals and alloys - Determination of dezincification resistance of brass (ISO 6509 : 1981).
ISO 7-1:1994	Pipe threads where pressure-tight joints are made on the thread - Part 1: Dimensions, tolerances and designation.
ISO 228-1:1994	Pipe threads where pressure-tight joints are not made on the thread - Part 1: Dimensions, tolerances and designation.
ISO 7005-3:1988	Metallic flanges - Part 3: Copper alloy and composite flanges.

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<sup>1)</sup> All pressures are gauge unless otherwise stated

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