



IRISH STANDARD

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National Standards Authority of Ireland Dublin 9 Ireland

Tel: (01) 807 3800 Tel: (01) 807 3838

INDUSTRIAL VALVES - ISOLATING VALVES
FOR LNG - SPECIFICATION FOR SUITABILITY
AND APPROPRIATE VERIFICATION TESTS

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

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## English version

# Industrial valves - Isolating valves for LNG - Specification for suitability and appropriate verification tests

Robinetterie industrielle - Robinets de sectionnement pour GNL - Prescriptions d'aptitude à l'emploi et vérifications s'y rapportant

Industriearmaturen - Absperrarmaturen für Flüssigerdgas - Anforderungen an die Gebrauchstauglichkeit und deren Prüfungen

This European Standard was approved by CEN on 25 June 2000.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

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# **Foreword**

This European Standard has been prepared by Technical Committee CEN/TC 69 "Industrial valves", 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of an identical text or by endorsement, at the latest by January 2001, and conflicting national standards shall be withdrawn at the latest by January 2001.

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.

# 1 Scope

This European Standard specifies the general performance requirements of isolating valves (gate valves, globe valves, plug and ball valves and butterfly valves) used in the production, storage, transmission (by pipeline, rail, road or sea) of Liquefied Natural Gas (LNG). LNG filling valves for vehicule refuelling systems are excluded from the scope of this standard.

DN range from DN 8 to DN 1000.

PN range from PN 16 to PN 100.

Class range from Class 150 to Class 900.

Temperature range from – 196 °C to + 60 °C.

### 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 edition of the publication referred to applies (including amendments).

EN 19, Industrial Valves - Marking.

EN 736-1, Valves - Terminology - Part 1: Definition of types of valves.

EN 736-2, Valves - Terminology - Part 2: Definition of components of valves.

EN 736-3, Valves - Terminology - Part 3: Definition of terms.

EN 764, Pressure equipment - Terminology and symbols - Pressure, temperature and volume.

EN 1160, Installations and equipment for liquefied natural gas - General characteristics of liquefied natural gas.

EN 10045-1, Metallic materials - Charpy impact tests - Part 1: Test method.

EN 12308, Installations and equipment for LNG - Suitability testing of gaskets designed for flanged joints used on LNG piping.

EN ISO 5210, Industrial valves – Multi-turn actuator attachments (ISO 5210:1991).

prEN ISO 5211:2000, Industrial valves - Part-turn valve actuator attachments (ISO/FDIS 5211:2000).

prEN 12266-1:1999, Industrial valves – Testing of valves - Part 1: Tests, test procedures and acceptance criteria to be fulfilled by every valve.

prEN 12516-1:2000, Industrial Valves – Shell Design Strength – Part 1: Tabulation Method for Steel Valves.

prEN 12516-2:2000, Industrial Valves - Shell Design Strength - Part 2: Calculation Method for Stell Valves

prEN 12516-3:1999, Valves - Shell design strength - Part 3: Experimental method.

EN 12570, Industrial valves - Method for sizing the operating element.

ISO 10497, Testing of valves - Fire type-testing requirements.

ASTM A 380, Standard practice to cleaning, descaling and passivation of stainless steel parts, equipment and systems.



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