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Threaded pipe fittings in malleable cast iron

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

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English Version

Threaded pipe fittings in malleable cast iron

Raccords de tuyauterie filetés en fonte malléable

Gewindefittings aus Temperguss

This European Standard was approved by CEN on 17 November 2025.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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EN 10242:2025 (E)**European foreword**

This document (EN 10242:2025) has been prepared by Technical Committee CEN/TC 459 “ECISS - European Committee for Iron and Steel Standardization”¹, 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of an identical text or by endorsement, at the latest by June 2026 and conflicting national standards shall be withdrawn at the latest by June 2026.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 10242:1994.

This document includes the following significant technical changes with respect to EN 10242:1994:

- normative references have been updated;
- additional fittings types used in UK have been introduced in Table 1;
- terms and definitions under Clause 3 have been revised;
- requirements for hot dip galvanizing under 6.2.1 have been changed, and the chemical composition with regard to dangerous substances under 6.2.2 has been adjusted;
- malleable cast iron grades in 5.2.1 have been reduced and therefore the number of Design Symbols in Table 2 has been reduced;
- new subclause 8.5 “Reaction to fire” has been added;
- change from ISO to EN requirements in 12.3 has been made;
- Method B for designation has been moved to a note under 13.2;
- Clause 12 has become subclause 12.8.1 and has been updated;
- additional types and sizes used in UK have been introduced in the tables in Clause 15.

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 organizations 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.

¹ Through its sub-committee CEN/TC 459/SC 10 “Steel tubes, and iron and steel fittings” (secretariat: UNI).

1 Scope

This document specifies the requirements for the design and performance of threaded pipe fittings in malleable cast iron with black or hot dip galvanized surface.

These fittings are for general purposes for the transmission of fluids and gases up to the limits of operating pressure and operating temperature specified in this document. They are intended for the connection of elements threaded with sizes 1/8 to 6 (DN 6 to DN 150).

Fittings with alternative permanent coatings or permanent coatings on top of hot dip galvanizing do not fall under the scope of this document.

NOTE One main use is for the connection of non-alloy steel tubes according to EN 10255 and with support of the thread joint by using sealing materials according to the EN 751 series.

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 1562, *Founding — Malleable cast irons*

EN 10204, *Metallic products — Types of inspection documents*

EN 10216-1, *Seamless steel tubes for pressure purposes — Technical delivery conditions — Part 1: Non-alloy steel tubes with specified room temperature properties*

EN 10216-2, *Seamless steel tubes for pressure purposes — Technical delivery conditions — Part 2: Non-alloy and alloy steel tubes with specified elevated temperature properties*

EN 10217-1, *Welded steel tubes for pressure purposes — Technical delivery conditions — Part 1: Electric welded and submerged arc welded non-alloy steel tubes with specified room temperature properties*

EN 10217-2, *Welded steel tubes for pressure purposes — Technical delivery conditions — Part 2: Electric welded non-alloy and alloy steel tubes with specified elevated temperature properties*

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 10226-2, *Pipe threads where pressure tight joints are made on the threads — Part 2: Taper external threads and taper internal threads — Dimensions, tolerances and designation*

EN 10255, *Non-Alloy steel tubes suitable for welding and threading — Technical delivery conditions*

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 1460, *Metallic coatings — Hot dip galvanized coatings on ferrous materials — Gravimetric determination of the mass per unit area (ISO 1460)*

EN ISO 2178, *Non-magnetic coatings on magnetic substrates — Measurement of coating thickness — Magnetic method (ISO 2178)*

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EN ISO 6892-1, *Metallic materials — Tensile testing — Part 1: Method of test at room temperature (ISO 6892-1)*

ISO 2859-1, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

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