

**Ductile iron wide tolerance couplings
and flange adaptors for use with pipes
of different materials: ductile iron, Grey
iron, Steel, PVC-U PE, Fibre-cement**

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adaptors for use with pipes of different materials:
ductile iron, Grey iron, Steel, PVC-U PE, Fibre-
cement

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 14525:2005 sisaldab Euroopa standardi EN 14525:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 25.01.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 14525:2005 consists of the English text of the European standard EN 14525:2004.</p> <p>This document is endorsed on 25.01.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This European Standard specifies the requirements and associated test methods applicable to wide tolerance ductile iron couplings and wide tolerance flange adaptors intended for use with pipe components made from a number of pipe materials (ductile iron, grey iron, PE, PVC-U, steel, fibre-cement), for providing a leak tight seal over a wide range of pipe external diameters :- to convey water (e.g. potable water) ; - with or without pressure ; - to be installed below or above ground, inside or outside buildings.</p>	<p>Scope:</p> <p>This European Standard specifies the requirements and associated test methods applicable to wide tolerance ductile iron couplings and wide tolerance flange adaptors intended for use with pipe components made from a number of pipe materials (ductile iron, grey iron, PE, PVC-U, steel, fibre-cement), for providing a leak tight seal over a wide range of pipe external diameters :- to convey water (e.g. potable water) ; - with or without pressure ; - to be installed below or above ground, inside or outside buildings.</p>
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ICS 23.040.10, 23.040.60

Võtmesõnad:

ICS 23.040.10; 23.040.60

English version

**Ductile iron wide tolerance couplings and flange adaptors for
use with pipes of different materials: ductile iron, Grey iron,
Steel, PVC-U PE, Fibre-cement**

Adaptateurs de brides et manchons à larges tolérances en
fonte ductile destinés à être utilisés avec des tuyaux faits
de différents matériaux : fonte ductile, fonte grise, acier,
PVC-U, PE, fibre-ciment

Großbereichskupplungen und -flanschadapter aus duktilem
Gusseisen zur Verbindung von Rohren aus
unterschiedlichen Werkstoffen: Duktiles Gusseisen,
Gusseisen mit Lamellengraphit, Stahl, PVC-U, PE,
Faserzement

This European Standard was approved by CEN on 23 September 2004.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

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Foreword

This document (EN 14525:2004) has been prepared by Technical Committee CEN/TC 203 “Cast iron pipes, fittings and their joints”, 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 May 2005, and conflicting national standards shall be withdrawn at the latest by May 2005.

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

Introduction

This standard is in conformity with the general requirements already established by CEN/TC 164 in the field of water supply.

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

- a) 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 ;
- b) it should be noted that, while 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 document specifies the requirements and associated test methods applicable to wide tolerance ductile iron couplings and wide tolerance flange adaptors intended for use with pipe components made from a number of pipe materials (ductile iron, grey iron, PE, PVC-U, steel, fibre-cement), for providing a leak tight seal over a wide range of pipe external diameters :

- to convey water (e.g. potable water) ;
- with or without pressure ;
- to be installed below or above ground, inside or outside buildings.

This document is not intended to cover sewerage or gas applications, where other requirements may be necessary.

This document specifies requirements for materials, dimensions and tolerances, mechanical properties and standard coatings of ductile iron products.

This standard covers ductile iron products cast by any type of foundry process or manufactured by fabrication of cast components, as well as corresponding joints, in a size range extending from DN 40 to DN 600, for an allowable operating pressure (PFA) up to 16 bar, for fluid temperatures between 0 °C and 25 °C excluding frost. For higher temperatures, up to 50 °C, additional type testing should be carried out.

It also gives performance requirements and associated test methods for restrained and non-restrained flexible joints. Joint design and gasket shapes are outside the scope of this standard.

NOTE 1 PFA may be limited depending on pipe materials effectively connected.

NOTE 2 In this document, all pressures are relative gauge pressures, expressed in bars (100 kPa = 1 bar).

NOTE 3 EN 545 gives the specifications for the ductile iron fittings to be used with ductile iron pipes.

NOTE 4 EN 12842 gives the specifications for the ductile iron fittings to be used with PVC-U and PE pipes.

2 Normative references

The following referenced documents are indispensable for the application 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 681-1, *Elastomeric seals – Material requirements for pipe joint seals used in water and drainage applications – Part 1 : vulcanized rubber.*

EN 805, *Water supply – Requirements for systems and components outside buildings.*

EN 1092-2, *Flanges and their joints – Circular flanges for pipes, valves, fittings and accessories, PN designated – Part 2 : Cast iron flanges.*

EN 10002-1, *Metallic materials – Tensile testing – Part 1 : Method of test at ambient temperature.*

EN ISO 4016, *Hexagon head bolts – Product grade C (ISO 4016:1999).*

EN ISO 4034, *Hexagon nuts – Product grade C (ISO 4034:1999).*

EN ISO 6506-1, *Metallic materials – Brinell hardness test – Part 1 : Test method (ISO 6506-1:1999).*

EN ISO 7091, *Plain washers – Normal series – Product grade C (ISO 7091:2000).*