Raudteealased rakendused. Raudteeveeremi pidurikettad. Osa 2: Rattale paigaldatud pidurikettad. Mõõtmed ja kvaliteedinõuded

Railway applications - Brake discs for railway rolling stock -Part 2: Brake discs mounted onto the wheel, dimensions and occursion occursion of the second of the second occurs occurs occurs on the second occurs of the second occurs occurs on the second occurs of the second occurs occ quality requirements



FESTI STANDARDI FESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 14535-2:2011 sisaldab Euroopa standardi EN 14535-2:2011 ingliskeelset teksti.

This Estonian standard EVS-EN 14535-2:2011 consists of the English text of the European standard EN 14535-2:2011.

Standard on kinnitatud Eesti Standardikeskuse 29.07.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

This standard is ratified with the order of Estonian Centre for Standardisation dated 29.07.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 15.06.2011.

Date of Availability of the European standard text 15.06.2011.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

ICS 45.060.01

Standardite reprodutseerimis- ja levitamisõigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonilisse süsteemi või edastamine ükskõik millises vormis või millisel teel on keelatud ilma Eesti Standardikeskuse poolt antud kirjaliku loata.

Kui Teil on küsimusi standardite autorikaitse kohta, palun võtke ühendust Eesti Standardikeskusega: Aru 10 Tallinn 10317 Eesti; www.evs.ee; Telefon: 605 5050; E-post: info@evs.ee

Right to reproduce and distribute belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without permission in writing from Estonian Centre for Standardisation.

If you have any questions about standards copyright, please contact Estonian Centre for Standardisation: Aru str 10 Tallinn 10317 Estonia; www.evs.ee; Phone: 605 5050; E-mail: info@evs.ee

EUROPEAN STANDARD

EN 14535-2

NORME EUROPÉENNE EUROPÄISCHE NORM

June 2011

ICS 45.060.01

English Version

Railway applications - Brake discs for railway rolling stock - Part 2: Brake discs mounted onto the wheel, dimensions and quality requirements

Applications ferroviaires - Disques de frein pour matériel roulant ferroviaire - Partie 2: Disques de frein montés sur la roue, dimensions et exigences de qualité

Bahnanwendungen - Bremsscheiben für Schienenfahrzeuge - Teil 2: Bremsscheiben, die an einem Rad befestigt werden, Abmessungen und Qualitätsanforderungen

This European Standard was approved by CEN on 4 May 2011.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

	ents	Page
orewo	ord	3
	uction	
I	Scope	5
2	Normative references	5
3	Terms and definitions	5
1	Symbols	7
5	Items to be agreed between contracting parties and documented	7
5.1 5.2	Information to be supplied	7
0.2	Items for agreement	
5 6.1	Requirements Purpose	
5.2	Materials, design and manufacture	
6.3	Dimensions	
6.4	Performance	-
6.5	Installation	_
7	Test methods	18
7.1	Type tests (Category A test)	
7.2	Application test	18
7.3	Routine tests	19
3	Classification and designation	20
3.1	Classification	20
3.2	Designation	20
•	Marking and packaging	21
9.1	Marking	
9.2	Packing and protection	22
Annex	A (informative) Experimentation in service (checking of the operating requirement) category C2 test	23
∆nnev	ZA (informative) Relationship between this European Standard and the Essential	
	Requirements of EU Directive 2008/57/EC	24
Riblion	graphy	
2.008	1144111	21

Foreword

This document (EN 14535-2:2011) has been prepared by Technical Committee CEN/TC 256 "Railway applications", the secretariat of which is held by DIN.

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 December 2011 and conflicting national standards shall be withdrawn at the latest by December 2011.

This document has been prepared under a mandate given to CEN/CENELEC/ETSI by the European Commission and the European Free Trade Association, and supports Essential Requirements of EU Directive 2008/57/EC.

For relationship with EU Directive 2008/57/EC, see informative Annex ZA, which is an integral part of this document.

This series of European Standards Railway applications — Brake discs for railway rolling stock consists of:

- Part 1: Brake discs pressed or shrunk onto the axle or drive-shaft, dimensions and quality requirements
 [1]
- Part 2: Brake discs mounted onto the wheel, dimensions and quality requirements
- Part 3: Brake discs, performance of the disc and of the pad and disc friction couple, classification 1)

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

Until Part 3 is made publicly available, the existing relevant national standards or other suitable regulations should be used as an interim solution where prEN 14535-3 is referenced in this document.

NOTE On publication of Part 3, Part 2 may be reviewed to take into account any necessary changes.

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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

-

¹⁾ To be published.

Introduction

This European Standard gives the requirements to be met for the design, dimensions, performance and testall, per cc, that the c, ering practic. ing of the brake disc, hereafter called "disc". These requirements cannot be written in sufficient detail to ensure good workmanship or proper construction. Each manufacturer is therefore responsible for taking every necessary step to make sure that the quality of design, workmanship and construction is such as to ensure accordance with good engineering practice.

1 Scope

This European Standard specifies requirements to be met for the design, dimensions, performance and testing of the brake disc.

This European Standard applies to brake discs mounted onto the wheel, including the wheel web or wheel hub of railway rolling stock.

For each discrete unit so fitted, one or more disc brake rings, each having one friction face, may be deployed.

This European Standard applies to discs designed to be fitted to rail vehicles used on the main national networks, urban networks, underground railways, trams, private networks (regional railways, company railways, etc.).

In addition to the common requirements, this European Standard also requires the items detailed in Clause 5 to be documented. For compliance with this European Standard, both the common requirements and the documented items need to be met.

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 14478:2005, Railway applications — Braking — Generic vocabulary

prEN 15328²⁾, Railway applications — Braking — Brake pads

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 14478:2005 and the following apply.

3.1

brake disc

rotor having one or more co-planar annular friction faces for the engagement of brake pads and means of transmitting rotation between itself and the associated web or hub

NOTE 1 It may absorb and dissipate at least part of the brake energy.

NOTE 2 This definition is identical to 4.9.7.10 in EN 14478:2005.

3.2

friction face

radially and circumferentially extending planar surface of the disc available for frictional engagement of the brake pad(s)

3.3

brake ring

portion of the disc having the friction face

²⁾ To be published.