RAUDTEEALASED RAKENDUSED. SURUÕHKPIDURITE VAGUNITEVAHELISED ÜHENDUSED

Railway applications - Pneumatic half couplings

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 15807:2021 sisaldab Euroopa standardi EN 15807:2021 ingliskeelset teksti.	This Estonian standard EVS-EN 15807:2021 consists of the English text of the European standard EN 15807:2021.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 10.03.2021.	Date of Availability of the European standard is 10.03.2021.
Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.	The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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EUROPEAN STANDARD

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EUROPÄISCHE NORM

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English Version

Railway applications - Pneumatic half couplings

Applications ferroviaires - Demi-accouplements pneumatiques

Bahnanwendungen - Bremskupplungen

This European Standard was approved by CEN on 25 January 2021.

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

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

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European foreword

This document (EN 15807:2021) 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of an identical text or by endorsement, at the latest by September 2021, and conflicting national standards shall be withdrawn at the latest by September 2021.

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 15807:2011.

EN 15807:2021 includes the following technical changes with respect to EN 15807:2011:

— the document has been revised generally;

— tolerances, tables and figures have been updated;

— 5.8 “Fire behaviour” has been adapted due to EN 45545-1:2013 and EN 45545-2:2020;

— 5.1.3.5 “Adhesion of the reinforcement”: Nominal values have been adapted due to material parameters of the requested fire resistant material;

— 5.1.3.15 and 6.3.16 “Kink resistance test” has been added;

— 5.1.3.16 and 6.3.17 “Influence of oil” has been added;

— 5.1.4.6 “Oil resistance of the sealing washer” has been added;

— 5.1.6 “Nipple” and 5.1.7 “Hose clip” have been added;

— 6.4.7 “Influence of oil” has been added;

— Annex A “Vacuum withstand” has been removed;

— Annex ZA has been updated.

This document has been prepared under a standardization request given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of Directive 2016/797/EU.

For relationship with EU Directive 2016/797/EU, see informative Annex ZA, which is an integral part of this document.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Turkey and the United Kingdom.

1 Scope

This document applies to pneumatic half couplings designed to couple either the brake pipes or main reservoir pipes of railway vehicles, without taking the type of vehicles and track-gauge into consideration.

This document gives the requirements for the design, dimensions, testing and quality assurance of pneumatic half couplings.

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 1562:2019, *Founding - Malleable cast irons*

EN 1563:2018, *Founding - Spheroidal graphite cast irons*

EN 14478:2017, *Railway applications - Braking - Generic vocabulary*

EN 45545-1:2013, *Railway applications - Fire protection on railway vehicles - Part 1: General*

EN 45545-2:2020, *Railway applications - Fire protection on railway vehicles - Part 2: Requirements for fire behavior of materials and components*

EN 50125-1:2014, *Railway applications - Environmental conditions for equipment - Part 1: Rolling stock and on-board equipment*

EN ISO 228-1:2003, *Pipe threads where pressure-tight joints are not made on the threads - Part 1: Dimensions, tolerances and designation (ISO 228-1:2000)*

EN ISO 8033:2017, *Rubber and plastics hoses - Determination of adhesion between components (ISO 8033:2016)*

EN ISO 9227:2017, *Corrosion tests in artificial atmospheres - Salt spray tests (ISO 9227:2017)*

ISO 37:2017, *Rubber, vulcanized or thermoplastic — Determination of tensile stress-strain properties*

ISO 48-2:2018, *Rubber, vulcanized or thermoplastic — Determination of hardness — Part 2: Hardness between 10 IRHD and 100 IRHD*

ISO 1817:2015, *Rubber, vulcanized or thermoplastic — Determination of the effect of liquids*

ISO 188:2011, *Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests*

ISO 815-1:2019, *Rubber, vulcanized or thermoplastic — Determination of compression set — Part 1: At ambient or elevated temperatures*

ISO 815-2:2019, *Rubber, vulcanized or thermoplastic — Determination of compression set — Part 2: At low temperatures*

ISO 1431-1:2012, *Rubber, vulcanized or thermoplastic — Resistance to ozone cracking — Part 1: Static and dynamic strain testing*

ISO 1431-3:2017, *Rubber, vulcanized or thermoplastic — Resistance to ozone cracking — Part 3: Reference and alternative methods for determining the ozone concentration in laboratory test chambers*

ISO 2285:2019, *Rubber, vulcanized or thermoplastic — Determination of tension set under constant elongation, and of tension set, elongation and creep under constant tensile load*

ISO 8573-1:2010, *Compressed air — Part 1: Contaminants and purity classes*

ISO 10619-2:2017, *Rubber and plastics hoses and tubing — Measurement of flexibility and stiffness — Part 2: Bending tests at sub-ambient temperatures*

ISO 23529:2016, *Rubber — General procedures for preparing and conditioning test pieces for physical test methods*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 14478:2017 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at https://www.iso.org/obp

3.1
brake coupling head
components that, when mechanically coupled together, allow a flow of pressurised air between them

3.2
nipple
component at one end of the pneumatic half coupling that connects it to the end cock, or pipe, located on the vehicle

3.3
hose clip
component that mechanically fixes the hose to the coupling head or the nipple in order to assembly the pneumatic half coupling

3.4
sealing washer
component that is installed in the coupling head to prevent unacceptable loss of air when two coupling heads are connected to one another

3.5
flexible hose
component that is connected between the brake coupling head and the nipple to convey the pressurised air and give the required flexibility between vehicles, and that is generally made up of an elastic tube, textile reinforcement inlay and elastomeric cover bonded together

3.6
tube
inner layer of the flexible hose which is supplied by the compressed air