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Railway applications - Pneumatic half couplings

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Railway applications - Pneumatic half couplings

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents

	Page
European foreword.....	4
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions	6
4 Symbols and abbreviated terms	7
5 Design and manufacture.....	7
5.1 Requirements	7
5.1.1 Brake pipe.....	7
5.1.2 Main reservoir pipe.....	7
5.1.3 Flexible hose	7
5.1.4 Sealing washers	10
5.1.5 Coupling heads	12
5.1.6 Nipple	12
5.1.7 Hose clip	12
5.2 Compressed air quality	18
5.3 Ambient temperature	19
5.4 Environmental corrosion conditions.....	19
5.5 Leakage	19
5.6 Mechanical strength of assembly	19
5.7 External appearance	19
5.8 Fire behaviour	19
6 Type test methods.....	19
6.1 Sampling for type test.....	19
6.2 Test requirements	19
6.3 Test procedure flexible hose.....	20
6.3.1 Nature and proportion of the tests and inspections.....	20
6.3.2 Preparation of the test pieces.....	21
6.3.3 Bend test.....	22
6.3.4 Pressure test	23
6.3.5 Bursting test.....	23
6.3.6 Reinforcement adhesion test	23
6.3.7 Test of dynamic fatigue through repeated tensile loadings of the tube and cover	23
6.3.8 Test for residual deformation through static tensile loading after ageing	23
6.3.9 Impact test	24
6.3.10 Test for Resistance to ozone cracking of the tube and cover under static conditions	26
6.3.11 Deflection at low temperature	26
6.3.12 Test for fitting of connections on hoses	27
6.3.13 Uncoupling test	29
6.3.14 Flare test.....	30
6.3.15 Hardness test	31
6.3.16 Kink resistance test	31
6.3.17 Influence of oil.....	32
6.4 Test procedure sealing washers	32
6.4.1 Nature and proportion of the tests and inspections.....	32
6.4.2 Preparation of the test pieces.....	33
6.4.3 Hardness test	33
6.4.4 Tensile strength test	33
6.4.5 Deformation tests.....	33

6.4.6	Water tightness test.....	35
6.4.7	Influence of oil	36
6.5	Test procedure pneumatic half coupling	36
6.5.1	Principle.....	36
6.5.2	Check of physical and geometrical characteristics	37
6.5.3	Hydraulic test of the assembly at given pressure	37
6.5.4	Leakage.....	37
6.5.5	Corrosion test.....	39
6.5.6	Pull test.....	39
6.6	Documentation.....	40
7	Routine test.....	40
8	In-service assessment	41
9	Identification and marking	41
	Annex A (informative) MRP pneumatic half coupling for use in the United Kingdom	42
A.1	Main reservoir pipe hose incorporating pneumatic half coupling with sealing star valve.....	42
A.2	MRP rescue hoses	44
A.3	MRP rescue coupling head	44
A.4	MRP rescue coupling head identification	44
	Annex B (informative) In-service trial	45
B.1	General	45
B.2	Test set-up and sampling.....	45
B.3	Procedure	45
	Annex ZA (informative) Relationship between this European Standard and the essential requirements of Directive 2016/797/EU aimed to be covered.....	46
	Bibliography	48

EN 15807:2021 (E)**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*

EN 15807:2021 (E)

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*

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