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JA KATSEMEETODID

Building hardware - Cylinders for locks - Requirements
and test methods

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

Building hardware - Cylinders for locks - Requirements and test methods

Quincaillerie pour le bâtiment - Cylindres de serrures -
Exigences et méthodes d'essai

Schlösser und Baubeschläge - Schließzylinder für
Schlösser - Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 19 March 2015.

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Foreword

This document (EN 1303:2015) has been prepared by Technical Committee CEN/TC 33 "Doors, windows, shutters, building hardware and curtain walling", 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of an identical text or by endorsement, at the latest by December 2015, and conflicting national standards shall be withdrawn at the latest by December 2015.

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.

This document supersedes EN 1303:2005.

The European Federation of Associations of Lock and Builders Hardware Manufacturers, ARGE, collaborated in the drafting of this European Standard.

The main changes from the previous edition are to be found as follows:

- a) Definition 3.7: New definition for "movable detainer";
- b) Subclause 4.7.2: Temperature change from -20 °C and $+80\text{ °C}$ to -25 °C and $+65\text{ °C}$;
- c) Subclause 4.9.5: Plug extraction, two Grades A and B without extraction added; Grade C with 10 kN replaces grade 1; Grade D replaces grade 2;
- d) Clause 5: Added headline: Test - General and test apparatus;
- e) Subclause 6.9.4: Plug extraction test method developed;
- f) Subclause 7.5: Grade 1 replaced with grade A and grade B (see Annex A);
- g) Subclause 7.9: Additional grades for attack resistance introduced;
- h) Subclause 7.9: New grading for attack resistance (0, A to D), see new Annex E;
- i) Annex A: Suitability for use on fire/smoke resistant doors (normative);
- j) Annex A: Grade A for smoke added. Grade 1 replaced with Grade B;
- k) Annex B: Tables of test sequence (informative);
- l) Annex C: Product information (informative);
- m) Annex D: Manufacturers declaration (informative);
- n) Annex E: Comparison table between EN 1303:2005 and EN 1303:2015 (informative).

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

The aim of the test methods described in this standard is to keep human influence on the test results to a minimum, thus improving reproducibility.

The suitability of cylinders for use on fire or smoke-door assemblies is determined by fire performance tests conducted in addition to the performance testing required by this standard. Since suitability for use on fire doors is not essential in every situation the manufacturer has the option to state if the cylinder conforms to these additional requirements or not. If so claimed, cylinders will comply with the requirements in Annex A.

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1 Scope

This European Standard applies to cylinders and their keys for such locks as are normally used in buildings and are designed to be used with cylinders, where the locks have an operational torque of maximum 1,2 Nm.

This European Standard specifies performance and other requirements for the strength, security, durability, performance and corrosion resistance of cylinders and their original keys. It establishes one category of use, three grades of durability, three grades for fire and four grades corrosion resistance all based on performance tests as well as six grades of key related security based on design requirements and five grades on performance tests that simulate attack.

This European Standard includes tests of satisfactory operation at a range of temperatures. It specifies test methods to be used on cylinders and their protective measures linked with these cylinders and recommended by the manufacturer.

Corrosion resistance is specified by reference to the requirements of EN 1670 on corrosion resistance of building hardware.

The suitability of cylinders for use on fire or smoke-door assemblies is determined by fire performance tests conducted in addition to the performance testing required by this standard. Since suitability for use on fire doors is not essential in every situation the manufacturer has the option to state if the cylinder conforms to these additional requirements or not. If so claimed, cylinders will comply with the requirements in Annex A.

On occasions there may be a need for additional functions within the design of the cylinder. Purchasers should satisfy themselves that the products are suitable for their intended use.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 636, *Plywood — Specifications*

EN 1634-1, *Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware - Part 1: Fire resistance test for door and shutter assemblies and openable windows*

EN 1634-2, *Fire resistance and smoke control tests for door, shutter and openable window assemblies and elements of building hardware - Part 2: Fire resistance characterisation test for elements of building hardware*

EN 1634-3, *Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware - Part 3: Smoke control test for door and shutter assemblies*

EN 1670, *Building hardware - Corrosion resistance - Requirements and test methods*

EN 1906:2012, *Building hardware - Lever handles and knob furniture - Requirements and test methods*

EN ISO 10666, *Drilling screws with tapping screw thread - Mechanical and functional properties (ISO 10666)*

EN ISO 15480, *Hexagon washer head drilling screws with tapping screw thread (ISO 15480)*

EN ISO 15481, *Cross recessed pan head drilling screws with tapping screw thread (ISO 15481)*

EN ISO 15482, *Cross recessed countersunk head drilling screws with tapping screw thread (ISO 15482)*

EN ISO 15483, *Cross recessed raised countersunk head drilling screws with tapping screw thread (ISO 15483)*

ISO 10899, *High-speed steel two-flute twist drills — Technical specifications*

3 Terms and definitions

For the purpose of this document, the following terms and definitions apply.

3.1

cylinder

device, usually distinct from its associated lock or latch, operated by a key

3.2

cam

component of the cylinder to provide the movement to effect locking

3.3

effective differ

difference between cylinders of similar design, achieved only by the movable detainer, which allows each cylinder to be operated only by its own key

3.4

direct code

marking on the key where the key steps can be determined without reference to another data source

3.5

key

separate device corresponding to the cylinder, which can mechanically operate the cylinder

3.6

keyway

aperture extending along the whole or part of the length of the plug into which the key is inserted

3.7

movable detainer

permutable part of the mechanism of a cylinder which should first be moved by the key into a pre-determined position before the key and/or plug can move

3.8

plug

part of a cylinder that can be moved when the proper key is used

3.9

steps

characteristics of a key which operates movable detainers