SLOVENSKI STANDARD
SIST EN 1303:2026

01-julij-2026

Stavbno okovje - Profilni cilindri in Master-Key sistem (MKS) za ključavnice - Zahteve in preskusne metode

Building hardware - Cylinders and Master-Key-Systems (MKS) for locks - Requirements and test methods

Schlösser und Baubeschläge - Schließzylinder und Schließanlagen für Schlösser - Anforderungen und Prüfverfahren

Quincaillerie pour le bâtiment - Cylindres de serrures et systèmes de fermeture mécaniques - Prescriptions et méthodes d'essai

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Building hardware - Cylinders and Master-Key-Systems (MKS) for locks - Requirements and test methods

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

Schlösser und Baubeschläge - Schließzylinder und Schließanlagen für Schlösser - Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 9 February 2026.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 1303:2026) 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of an identical text or by endorsement, at the latest by November 2026, and conflicting national standards shall be withdrawn at the latest by November 2026.

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 1303:2015.

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

EN 1303:2026 includes the following significant technical changes with respect to EN 1303:2015:

a) Scope extended to include cylinders suitable for use in locking systems

b) New Annex F - Cylinders suitable for use in locking systems

c) Definitions related to MKS added

d) Requirements and evaluation methods for manipulation added

e) Classification (digit 3) changed from Door mass to Mechanical coding

f) Definition of pulling screws changed and normative Annex G introduced

g) Figures renumbered.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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, Türkiye and the United Kingdom.

Introduction

This document for mechanic locking cylinders and locking systems specifies requirements and test methods for functionality, durability, environmental and security conditions for use on doors in buildings or related to buildings.

The aim of the test methods described in this document is to keep human influence on the test results to a minimum, thus improving reproducibility. This document does not specify any particular design or installation.

Suitability for use on fire resistance or smoke control doors is not essential in every situation the manufacturer has the option to state if the cylinder conforms to these additional requirements according to Annex A.

Requirements and procedures to achieve and maintain protection of data and sensitive information related to mechanical Master Key Systems is given in CEN/TS 17814.

1 Scope

This document 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 1,5 Nm.

This document specifies performance and other requirements for the strength, security, durability, performance and corrosion resistance of cylinders and their original keys. It also specifies cylinders suitable for use in locking systems, Master key systems (MKS).

It establishes one category of use, three grades of durability, two grades for mechanical coding (single cylinders and MKS), 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 document 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 document, see Annex A.

This document does not apply to the assessment of fire resistance and smoke control doors equipped with lock cylinders grade A and grade B.

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 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 12164:2024, *Copper and copper alloys — Rod for free machining purposes*

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

3 Terms and definitions

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

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

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

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

3.1
active moveable detainer
permutable blocking element, which needs to be moved by the key into a pre-determined position in the aligned or shearline position in order to unblock the cylinder and which may stay at least in one step before and in one step after the aligned or shearline position where the cylinder stays in the blocked condition

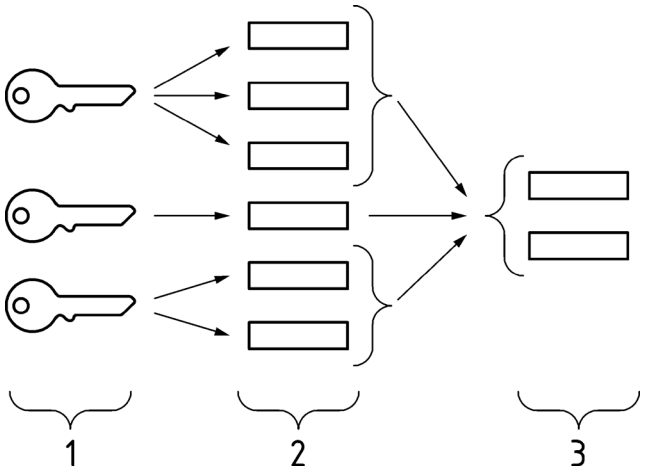
3.2
attack
unauthorized attempt to open a cylinder by various destructive techniques

3.3
cylinder
device, usually distinct from its associated lock or latch, operated by a key

3.4
cam
component of the cylinder to provide the movement to effect locking

3.5
central locking cylinder
coded cylinder of a locking system where a number of different keys operate this cylinder

3.6
central locking system
locking system which has only one level of coded keys operating different cylinders whereby all keys operate central cylinders



Key

1 Individual key
2 Locking cylinder
3 Central locking cylinder

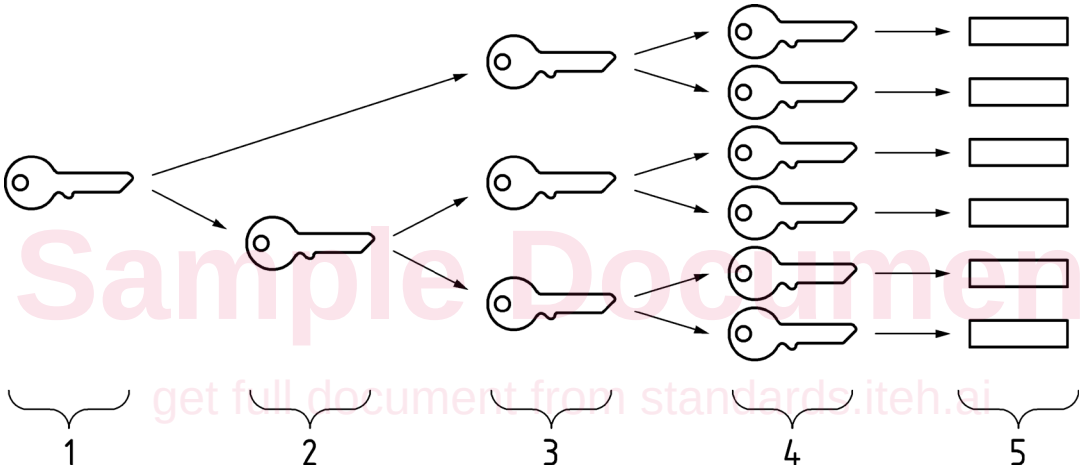
Figure 1—Example for a central locking system

3.7
direct code
marking on the key where the key coding can be determined without reference to another data source

3.8
effective differ
difference between cylinders of similar design, achieved only by the active movable detainer, which allows each cylinder to be operated only by its own key

3.9
grand master key (GMK)
operates all cylinders within a GMK system

3.10
grand master key system (GMK-system)
locking system which has 3 or more levels of coded keys operating different cylinders



Key

1 Grand Master key
2 Sub-Master Key (level 1)
3 Sub-Master Key (level n)
4 Individual keys locking cylinders
5 Locking cylinders

Figure 2 — Example of a (structured) Grand master key system

Note 1 to entry: The combination of grand master key system with a central locking system (3.5) is possible.

3.11
key
separate device corresponding to the cylinder, which can mechanically operate the cylinder

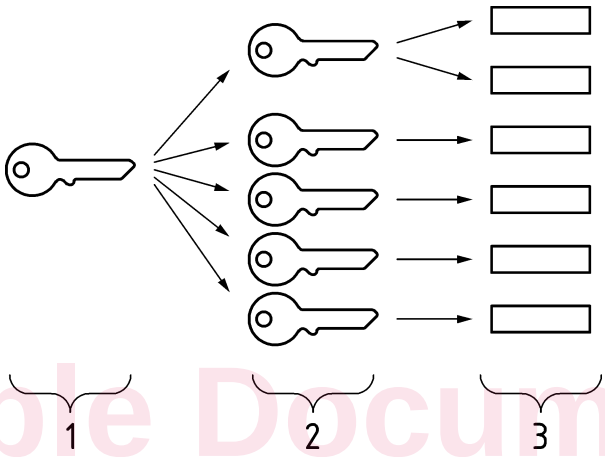
3.12
keyway
aperture extending along the whole or part of the length of the plug into which the key is inserted

3.13
lock chart
describing the interaction with all keys and cylinders in the locking system

3.14
locking system
Combination of different coded cylinders and keys that are functionally related to each other

3.15
Manipulation
unauthorized attempt to open a cylinder by various non-destructive techniques

3.16
master key system (MK-system)
Locking system which has 2 levels of coded keys operating different cylinders whereby the master key can operate all cylinders



Key

1 Master key
2 Individual key
3 Locking cylinder

Figure 3 — Example for a master key system

Note 1 to entry: The combination of master key system with a central locking system (3.5) is possible.

3.17
moveable 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

3.18
passive moveable detainer
blocking elements, which needs to be in the aligned or shearline position to unblock the cylinder and which may stay at least in one step before or alternatively in one step after the aligned or shearline position where the cylinder stays in the blocked condition

3.19
plug
part of a cylinder that can be rotated when the proper key is used

3.20
steps
characteristics of a key which operates movable detainers

3.21
sub master key (SMK)
operates a defined group of cylinders within a GMK system

4 Requirements

4.1 General

The structure of this clause reflects the classification in accordance with Clause 7.

Additional requirements for cylinders suitable for use in locking systems are defined in Annex F.

4.2 Category of use — Key strength

Cylinders and keys shall be designed for an operational maximum torque in the application of 1,5 Nm.

The key shall not break under the applied torque of 2,5 Nm.

After the test, the key shall be capable of being removed from the cylinder and re-used to operate the same cylinder with a torque not exceeding 1,5 Nm.

This requirement shall be tested in accordance with 6.2.

4.3 Durability

It shall be possible to operate the cylinders with a new original key after the number of test cycles specified in Table 1.

This requirement shall be tested in accordance with 6.3.

Table 1 — Number of cycles

Durability	Number of cycles
Grade 4	25 000
Grade 5	50 000
Grade 6	100 000

4.4 Mechanical coding

Grade 1 is for keyed to differ (KD) or keyed alike cylinders (KA).

Grade 2 is for cylinder locking system according to Annex F.

4.5 Suitability for use on fire resistant / smoke control doors

The cylinder shall conform to the requirements of Annex A.

This requirement shall be verified in accordance with 6.5.

4.6 Safety

There is no requirement on the cylinder related to safety.