# SLOVENSKI STANDARD
# SIST EN 17829:2023

**01-september-2023**

**Nadomešča:**
**SIST EN 16287-1:2014**
**SIST EN 16287-2:2014**
**SIST EN 16288-1:2014**
**SIST EN 16288-2:2014**
**SIST EN 16289:2013**
**SIST EN 16290-1:2014**
**SIST EN 16290-2:2014**
**SIST EN 16291-1:2013**
**SIST EN 16291-2:2013**
**SIST EN 16291-2:2013/AC:2014**



**Steklena embalaža - Grla z navojem odprtine 28 mm za steklenice (oznaka MCA) - Mere**

Glass packaging - 28 millimetre-screw finishes (MCA range) - Dimensions

Verpackungen aus Glas - 28 Millimeter-Schraubmundstücke (MCA-Serie) - Maße

Emballage en verre - Bagues à vis de 28 millimètres (bagues MCA) - Dimensions

**Ta slovenski standard je istoveten z:** **EN 17829:2023**

**ICS:**

| | | |
|---|---|---|
| 55.100 | Steklenice. Lonci. Kozarci | Bottles. Pots. Jars |

**SIST EN 17829:2023** **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

# EN 17829

July 2023

ICS 55.100

Supersedes EN 16287-1:2014, EN 16287-2:2014, EN 16288-1:2014, EN 16288-2:2014, EN 16289:2013, EN 16290-1:2014, EN 16290-2:2014, EN 16291-1:2013, EN 16291-2:2013

English Version

# Glass packaging - 28 millimetre-screw finishes (MCA range) - Dimensions

Emballage en verre - Bagues à vis de 28 millimètres (bagues MCA) - Dimensions

Verpackungen aus Glas - 28 Millimeter-Schraubmundstücke (MCA-Serie) - Maße

This European Standard was approved by CEN on 26 June 2023.

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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

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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## European foreword

This document (EN 17829:2023) has been prepared by Technical Committee CEN/TC 261 “Packaging”, 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of an identical text or by endorsement, at the latest by January 2024, and conflicting national standards shall be withdrawn at the latest by January 2024.

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 16287-1:2014, *Glass packaging — Screw finishes for pressure capsules — Part 1: Returnable glass MCA 1 finish;*

— EN 16287-2:2014, *Glass packaging — Screw finishes for pressure capsules — Part 2: One way glass MCA 1 finish;*

— EN 16288-1:2014, *Glass packaging — Screw finishes for pressure capsules — Part 1: Returnable glass MCA 3 finish;*

— EN 16288-2:2014, *Glass packaging — Screw finishes for pressure capsules — Part 2: One way glass MCA 3 finish;*

— EN 16289:2013, *Glass packaging — Screw finishes for pressure capsules — MCA 7,5 RF finish;*

— EN 16290-1:2014, *Glass packaging — Screw finishes for pressure capsules — Part 1: Returnable glass MCA 7,5 R finish;*

— EN 16290-2:2014, *Glass packaging — Screw finishes for pressure capsules — Part 2: One way glass MCA 7,5 R finish;*

— EN 16291-1:2013, *Glass packaging — Screw finishes for pressure capsules — Part 1: Returnable glass MCA 2 finish;*

— EN 16291-2:2013, *Glass packaging — Screw finishes for pressure capsules — Part 2: One way glass MCA 2 finish.*

The main changes compared to the previous editions are listed below:

— merger of all the requirements and dimensional features in one single document.

— some dimensions have been slightly modified in order to harmonize the main dimensions of the different MCA-types (ØN, height F, some radii, …).

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

MCA is the designation for the agreement regarding a common finish specification between the companies Metal Closures Limited in Great Britain and Alcoa in the USA which are at the origin of these finishes. Originally, these finishes were used on “one way” (single trip) bottles with aluminium closures. The advent of the returnable market in Europe made it necessary to redesign the neck finish to overcome shortcomings in thread and sealing performance. The main differences between the finishes are concerning the thread profile and its pitch.

Historically, the development of the MCAs is partially explained by the differences presented below:

— MCA 1: “flat” under-thread profile, well adapted to the plastic closures;

— MCA 2: round thread profile, more robust and hence better adapted to returnable bottles, but with a risk of ‘blow-off’ with plastic closures;

— MCA 3: thinner thread with flat profile both under and above the finish, closer to the MCA 1, and better adapted for plastic closures and to high pressure;

— MCA 7,5 R (R for round profile): based on the MCA2 but with deeper thread;

— MCA 7,5 RF (RF for round flat): compromise between MCA1 (flat profile under the thread) and the MCA 7,5 R (strong wider thread profile).



A non-exhaustive list of examples of uses in Europe is given in Annex A.

As many different versions of MCA finish exist, the filler should check with the cap manufacturer that the finish design is compatible with the cap.

# 1 Scope

This document specifies the dimensions of the various 28 mm screw finishes for glass containers designated MCA.

# 2 Normative references

There are no normative references in this document.

# 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:

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

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

**3.1**
**MCA**
finish designed for the closure of pressurized or vacuum liquids with a closure (metal or plastic) which on first opening needs to break the tamper evident feature

Note 1 to entry: The finish can be designed with an optional bead for design flexibility (see Figure 1):




**a) MCA without transfer bead** **b) MCA with transfer bead**

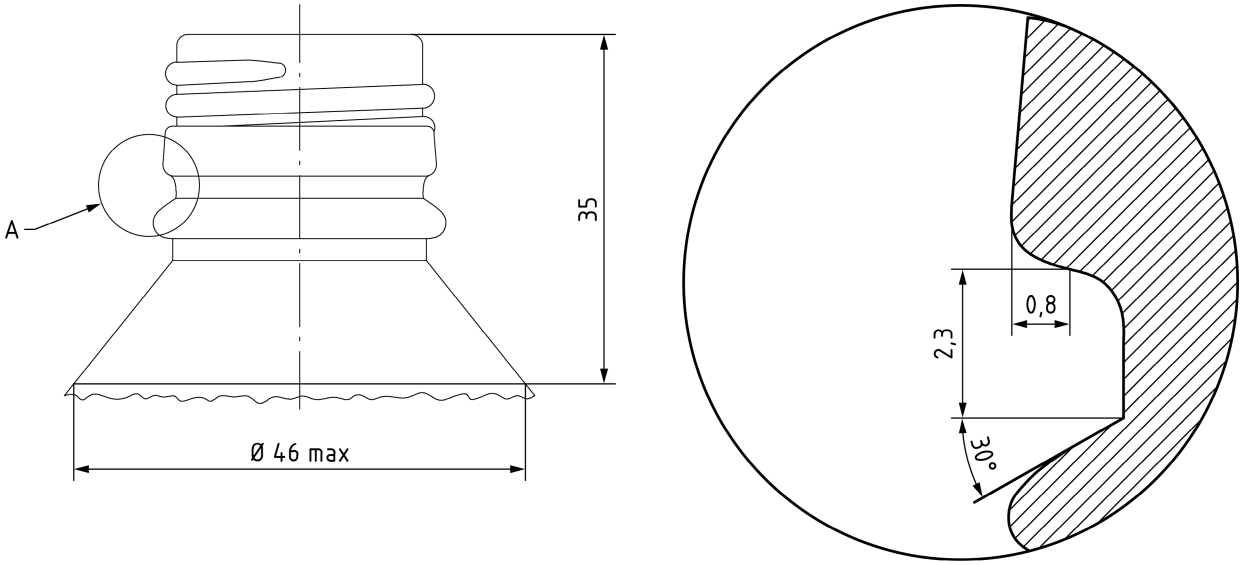
**Key**
1 optional transfer bead

**Figure 1 — Example of MCA without and with additional transfer bead**

## 4 Capping head clearance

The capping head clearance shall comply with Figure 2. The Detail A shows the limits of construction under the crimping bead.

Dimensions in millimetres




**a) Dimensions** **b) Detail A**



**Figure 2 — Capping head clearance**

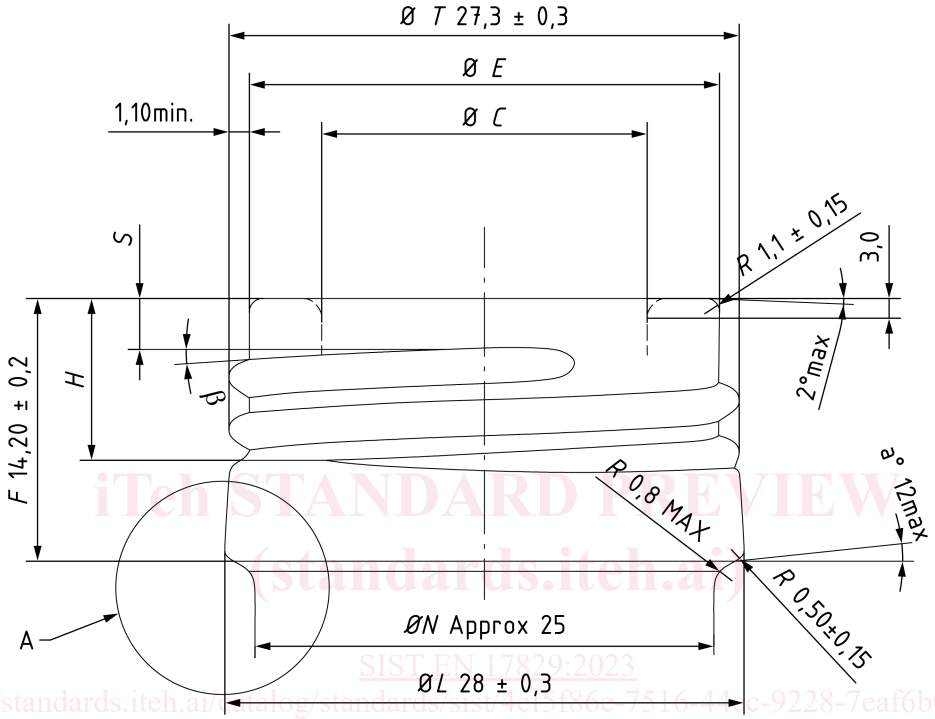
## 5 Dimensions

The dimensions should comply with Figure 3 in conjunction with the specific dimensions detailed in Table 1.

The entry bore should comply with one of the alternative constructions given in Figure 4.

The minimum through bore is 16 mm.

Dimensions in millimetres



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