



# SLOVENSKI STANDARD

## SIST EN 16592:2023

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Nadomešča:  
SIST EN 16592:2015

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**Embalaža - Toge plastične posode - PET-grla 29/25 (12,6)**

Packaging - Rigid plastic containers - PET finish 29/25 (12,6)

Verpackung - Formstabile Kunststoffbehälter - PET-Verschlussmundstück 29/25 (12,6)

Emballage - Récipients en plastique rigide - Bague PET 29/25 (12,6)

**Ta slovenski standard je istoveten z: EN 16592:2022**

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**ICS:**

55.100      Steklenice. Lonci. Kozarci      Bottles. Pots. Jars

**SIST EN 16592:2023**

**en,fr,de**



EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 16592**

October 2022

ICS 55.100

Supersedes EN 16592:2014

English Version

**Packaging - Rigid plastic containers - PET finish 29/25  
(12,6)**

Emballage - Récipients en plastique rigide - Bague PET  
29/25 (12,6)

Verpackung - Formstabile Kunststoffbehälter - PET-  
Verschlussmundstück 29/25 (12,6)

This European Standard was approved by CEN on 19 September 2022.

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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 16592:2022) 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of an identical text or by endorsement, at the latest by April 2023, and conflicting national standards shall be withdrawn at the latest by April 2023.

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 16592:2014.

In comparison with the previous edition, the following technical modifications have been made:

- the explanations about the tamper evident feature have been removed from the scope;
- the possibility of having an attached cap is now mentioned;
- in Figure 1: removal from the tolerance on the neck diameter Ø28.00, the dimension is now indicated Ø (28.00); a straight cylindrical zone of 3,50 mm is indicated under the support ledge; the angle of thread profile is 20° instead of 22° in the section B-B; the radius at the upper root of the support ledge in section B-B is R1 instead of R0,5;
- in detail C, the E dimension is (27,60) instead of (27,80), the concentricity of ØF is specified to ØA instead of to ØC;
- the weight has been recalculated at 2,42 g instead of 2,41 g;
- many editorial modifications have been made to clarify the specification.

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.

**EN 16592:2022 (E)**

## **Introduction**

Efficient packaging is a significant factor in respect of the distribution and the protection of goods. Insufficient or inappropriate packaging can lead to damage or wastage of the contents of the pack.

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## 1 Scope

This document specifies the design and dimensions of the 29 mm screw finish with three (3) thread starts for flat waters and non-carbonated beverages.

This document applies to finishes designated as PET finishes 29/25 (12,6). The dimension (12,6) is the height in millimetres from the top of finish to the bottom of the support ledge.

This finish can be used for aseptic filling and filling which utilizes nitrogen pressure where the internal overpressure does not exceed 1 bar maximum.

This finish is designed to accept only a tamper evident plastic closure, including those with an attachment feature.

## 2 Normative references

There are no normative references in this document.

## 3 Terms and definitions

No terms and definitions are listed in this document.

## 4 Dimensions

4.1 The design and dimensions of the finish shall be as shown in Figure 1. Dimensions are those of the preform.

4.2 Dimensions of the 3 thread starts 120° apart:

180° of full thread per lead:

- Radius 6,25 mm thread run-in;
- Radius 6,25 mm thread run-out.

Lead: 6,5 mm (travel per turn).

4.3 General tolerance for other radii:  $\pm 0,13$  mm.

4.4 Weight on height 12,6 mm: 2,42 g (density = 1,335 g/cm<sup>3</sup>).

## 5 Requirements

This finish is a top, side and inside seal finish.

This finish shall be smooth and free of any defects that will contribute to leaks. Flash shall not exceed 0,13 mm per side, and shall not be continuous.

The diameter under the support ledge shown at 28,00 mm (see Figure 1) refers to the preform. The diameter on the blown bottle under the support ledge should be maintained in tight tolerance as this is important for trouble-free capping.

On the blown bottle, the control diameter C shall be free of any defects up to 4 mm down for the internal bore and across the sealing surface of the finish.

Requirements for good closure application on the finish:

- 0,13 mm maximum out-of-parallel sealing surface with neck support ledge is allowed;
- an offset or vertical mismatch of thread shall not exceed 0,10 mm at the mould seam. Diameter T dimension is not measured in the depressed area.

Variations in diameter E shall follow uniformly those of diameter T.

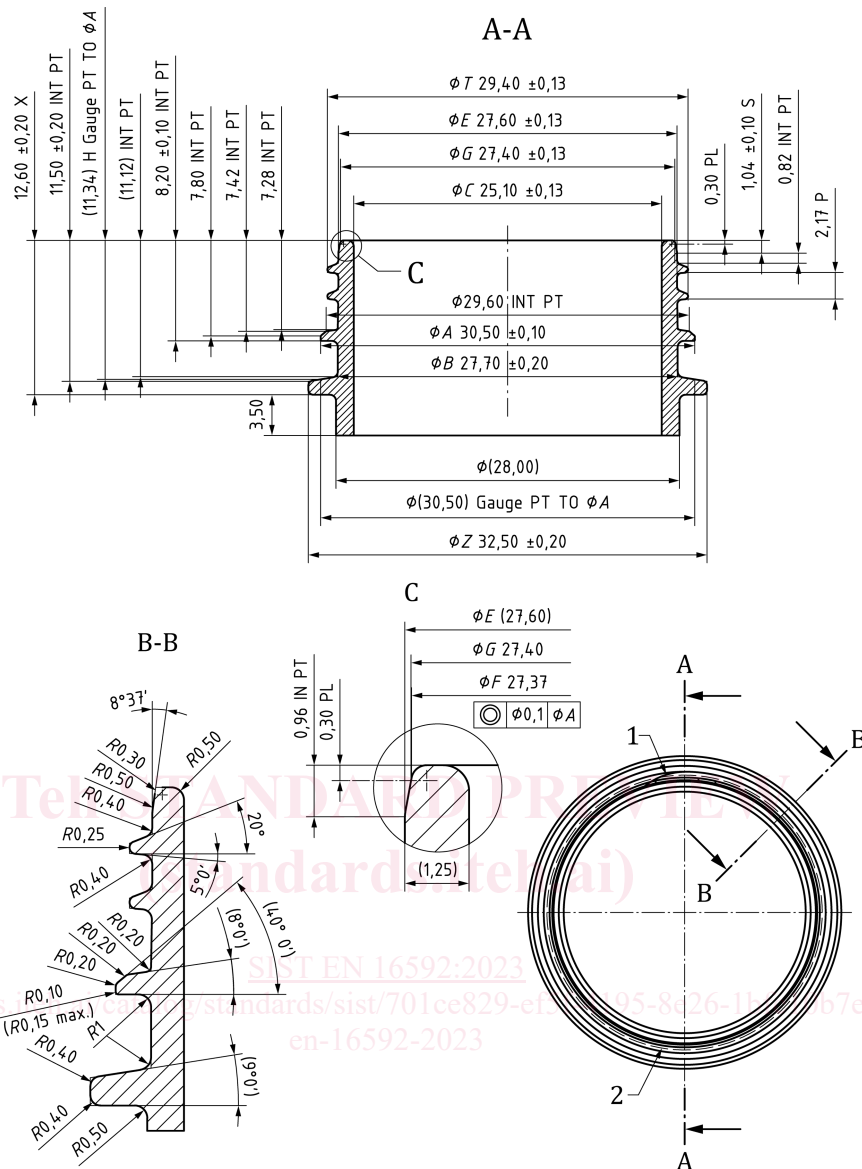
No overhang is allowed at any point in 360° between diameter F and diameter G. Flush to 0,15 mm maximum step is allowable on one side only. Diameter G shall not exceed diameter E.

For a successful capping operation the capping equipment shall be correctly adjusted and maintained in good condition.

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### Key

A	tamper evident bead diameter	P	thread pitch
B	tamper evident band recess diameter	PL	parting line
C	control diameter at top of finish	S	height from top of finish to start of full depth of thread
E	thread root diameter	T	thread crest diameter
F	upper ring diameter	X	height from top of finish to bottom of support ledge
G	lower ring diameter	Z	maximum diameter on support ledge
H	clearance height required for proper closure function	1	thread run-in
INT PT	intersection point	2	thread run-out

**Figure 1 — Design and dimensions of the finish**

## Bibliography

Cetie data sheet FS18.00, *Recommendations for index marks on PET bottle caps and neck finishes*

Cetie data sheet DT23.03, *Pet finishes glossary and nomenclature*

Cetie Guide N°5, *Application of flat top plastic screw-on threaded closures on PET bottles for beverages*

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