



SLOVENSKI STANDARD

SIST EN 15543:2008

01-september-2008

GHY`YbUYa VUUYU!'; f`UnUghY`Yb]W'!'; f`Un'bUj c^Ya `nUghY`Yb]W'nU
bY[Uh]fUbY'hY_c]bY

Glass packaging - Finishes for bottles - Screw thread finishes for bottles for non-carbonated liquids

Verpackung Flaschenverschlüsse - Schraubverschlussmündungen für Flaschen für nicht kohlenensäurehaltige Flüssigkeiten

Emballages en verre - Bagues pour bouteilles - Bagues a vis pour bouteilles contenant des liquides non carbonatés

Ta slovenski standard je istoveten z: EN 15543:2008

ICS:

55.100 Steklenice. Lonci. Kozarci Bottles. Pots. Jars

SIST EN 15543:2008

en,fr,de

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EUROPEAN STANDARD

EN 15543

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2008

ICS 55.100

English Version

Glass packaging - Finishes for bottles - Screw thread finishes for bottles for non-carbonated liquids

Emballages en verre - Bagues pour bouteilles - Bagues à vis pour bouteilles contenant des liquides non carbonatés

Verpackungen aus Glas - Flaschenverschlüsse - Schraubmundstücke für Flaschen für nicht kohlenensäurehaltige Flüssigkeiten

This European Standard was approved by CEN on 16 February 2008.

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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 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

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Foreword

This document (EN 15543:2008) 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of an identical text or by endorsement, at the latest by September 2008, and conflicting national standards shall be withdrawn at the latest by September 2008.

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.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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Introduction

Efficient packaging is of great importance for the distribution and the protection of goods as insufficient or inappropriate packaging can lead to damage or wastage of the contents of the pack.

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1 Scope

This European Standard specifies the dimensions of a range of screw thread finishes for the closure of bottles for beverages and other non-carbonated products, including the major sizes in use of standard and long skirt pilfer proof finishes.

NOTE This finish is not suitable for liquids that are stored horizontally.

2 Terms and definitions

For the purposes of this document, the following term and definition applies.

2.1

screw thread finish

finish designed to take a tamper-evident closure, which needs to be snapped before it can be opened

NOTE The finish is capped with a closure that might or might not have an extended skirt to cover part of the neck of the bottle. The finish, with the appropriate bore control, might also be fitted with an in-bore insert to control the pour or refill ability.

3 Requirements

All finishes shall be free from cracks and defects that would adversely affect sealing performance.

The verticality tolerance T_v of the bottle for satisfactory closure application is defined by the formula given in CE.T.I.E data sheet DT 2, but shall be limited to $T_v = 3,5$ mm for bottle height ≥ 320 mm

4 Types of screw threads finishes and dimensions

Screw thread finishes shall conform to one of the following types:

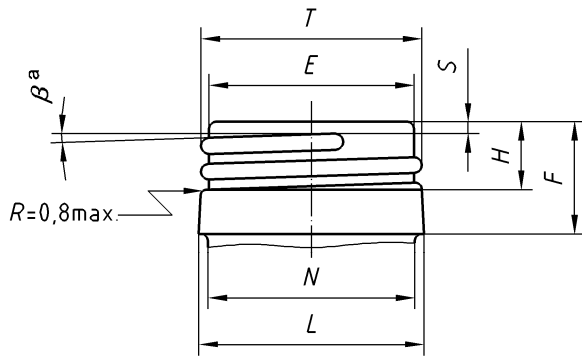
- a) type A: standard finish, as shown in Figure 1a)
- b) type B: standard finish with X and Y dimensions, as shown in Figure 1b), for use with a long skirt closure
- c) type C: deep finish, as shown in Figure 1c)
- d) type D: deep finish with X and Y dimensions, as shown in Figure 1d), for use with a long skirt closure
- e) type E: extra deep finish, as shown in Figure 1e)
- f) type F: standard finish with optional transition bead, as shown in Figure 2a)
- g) type G: deep finish with optional transition bead, as shown in Figure 2b)
- h) type H: optional deep finish, as shown in Figure 3, for closure with skirt covering the neck of the bottle with a support bead and X and Y dimensions.

The sizes and dimensions of type A, type B and type F screw thread finishes shall be as given in Table 1.

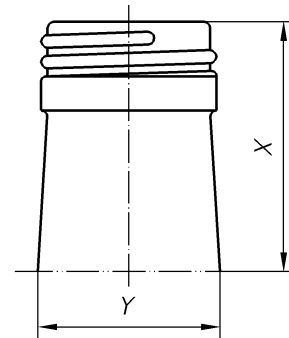
The sizes and dimensions of type C, type D, type E and type H screw thread finishes shall be as given in Table 2.

The dimensions of the optional transition bead for type F and type G screw-thread finishes shall be as given in Table 3.

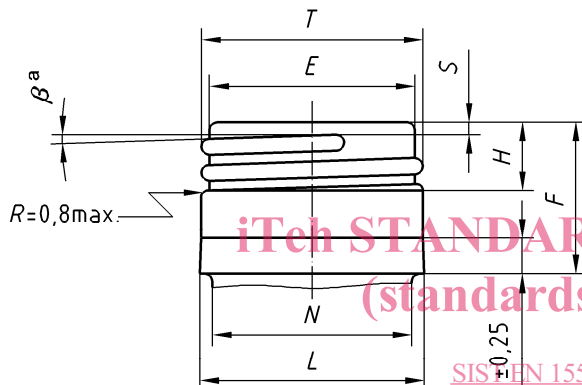
Dimensions in millimetres



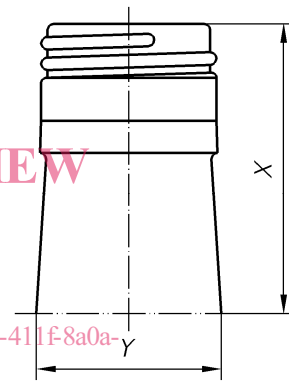
a) Type A: standard finish



b) Type B: standard finish with X and Y dimensions

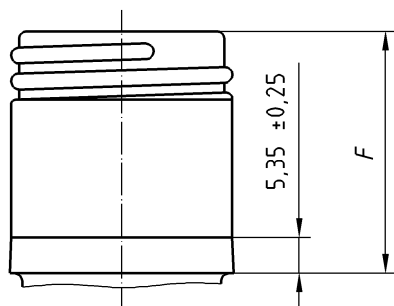


c) Type C: deep finish

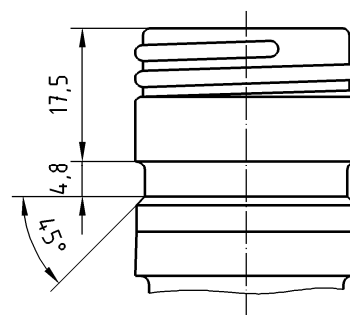


d) Type D: deep finish with X and Y dimensions

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e) Type E: extra deep finish



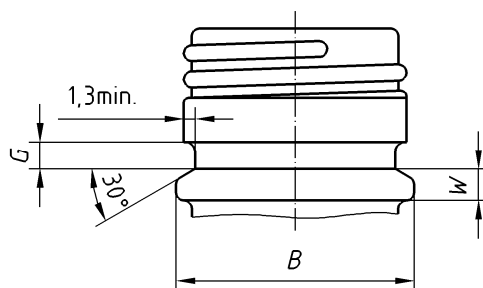
f) Optional take out groove (non functional for capping)

Key

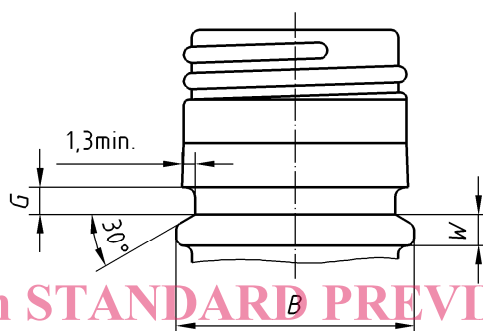
^a β is the helix angle, or the angle of cutter index

$$\tan\beta = \frac{\text{Pitch}}{\frac{\pi(\text{nominal } T + \text{nominal } E)}{2}}$$

Figure 1 — Screw thread finishes, type A to E



a) Type F: standard finish with optional transition bead



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b) Type G: deep finish with optional transition bead

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NOTE Dimensions are in Table 3

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Figure 2 — Screw thread finishes types F and G, with optional transition bead

Dimensions in millimetres

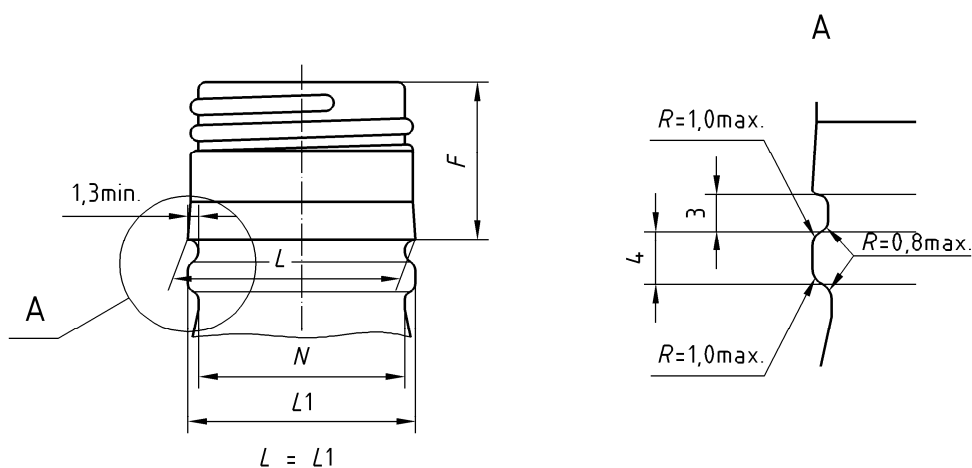


Figure 3 — Type H: optional deep finish with a support bead