# SLOVENSKI STANDARD
# SIST EN 14854:2022

**01-januar-2022**

**Nadomešča:**
**SIST EN 14854:2006**

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**Steklena embalaža - Mere vratu za steklene posode za aerosole in razpršila**

Glass packaging - Dimensions of neck finishes for aerosol and spray glass containers

Aerosolverpackungen - Glasbehälter - Maße der Mündungen



Récipients pour aérosols - Récipients en verre - Dimensions de la bague du col

**Ta slovenski standard je istoveten z:** **EN 14854:2021**



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**ICS:**

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|---|---|---|
| 55.130 | Pločevinke za aerosole | Aerosol containers |
| 81.040.30 | Izdelki iz stekla | Glass products |

**SIST EN 14854:2022** **en,fr,de**

EUROPEAN STANDARD

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EUROPÄISCHE NORM

# EN 14854

November 2021

ICS 55.130

Supersedes EN 14854:2005

English Version

# Glass packaging - Dimensions of neck finishes for aerosol and spray glass containers

Emballage en verre - Dimensions des bagues des flacons en verre pour générateurs d'aérosols et pulvérisateurs

Verpackungen aus Glas - Maße der Mündungen für Aerosolbehälter und Sprühbehälter aus Glas

This European Standard was approved by CEN on 30 August 2021.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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 foreword

This document (EN 14854:2021) 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of an identical text or by endorsement, at the latest by May 2022, and conflicting national standards shall be withdrawn at the latest by May 2022.

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 14854:2005.

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

— clear separation of the specifications for tubular glass from those for moulded glass;

— the height of the sealing bead on moulded glass only now has tolerances (and therefore the tolerance of the flange height is slightly increased);

— the dimension F has been recalculated to be more consistent with the finish geometry (driven by B max) for both moulded and tubular glass;



— addition of some complementary specifications for moulded glass: distance (G) from the lug to under flange, minimum height (H min) for a standard skirt and some angles and radii;

— introduction of a nomenclature of the specified dimensions.



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 announce this Technical Specification: 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, Turkey and the United Kingdom.

# 1 Scope

This document specifies dimensions of neck finishes for aerosol and spray glass containers, in order to guarantee tight sealing of valves or pumps with ferrules defined by EN 14849.

It applies to glass containers with a nominal diameter of the neck finish around 11 mm, 13 mm, 15 mm, 17 mm, 18 mm and 20 mm for both moulded and tubular glass neck finishes.

NOTE These neck finishes are commonly called FEA 11, 13, 15, 17, 18 and 20.

# 2 Normative references

There are no normative references in this document.

# 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological 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

# 4 Moulded glass



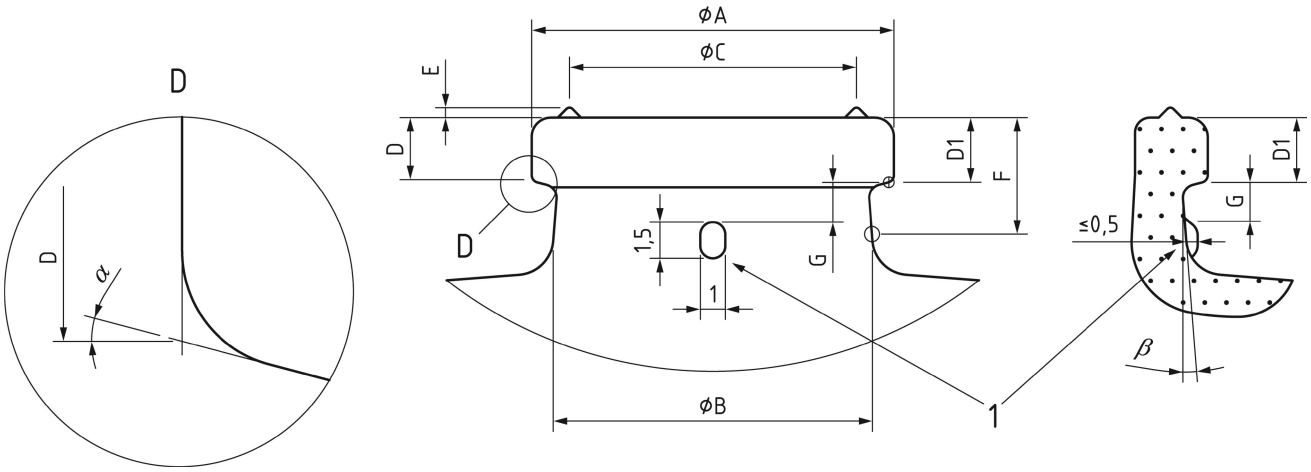
## 4.1 Neck finish diameter 13 mm to 20 mm

The dimensions of a moulded glass aerosol and spray glass container with a neck finish diameter of 13 mm to 20 mm shall conform to Figure 1 and Figure 2.



See Annex A for explanations of the symbols.

Dimensions in millimetres




| Name of the neck finish | Ø A | | Ø B max | Ø C | D | D1 | | E | | F min | G min |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **13** | 13,3 | 0 −0,3 | 12,3 | 11 | 2,5 | 2,50 | ±0,25 | 0,3 | +0,1 −0,2 | 4,7 | 1,65 |
| **15** | 15,3 | | 13,3 | 12 | 2,6 | 2,60 | | 0,4 | | 4,8 | 1,65 |
| **17** | 16,8 | | 14,0 | 12,8 | 3,5 | 3,50 | | 0,4 | | 5,7 | 1,95 |
| **18** | 18,5 | | 16,9 | 14,5 | 2,6 | 2,60 | | 0,4 | | 4,8 | 1,95 |
| **20** | 20 | 0 −0,4 | 17,8 | 15,5 | 3,2 | 3,20 | ±0,3 | 0,4 | | 5,4 | 1,95 |



**Key**

1 option: anti-rotation lug

B neck diameter under flange finish at height F

D construction dimension given on an indicative basis for mould production

D1 controlled height of the flange finish measured to reference diameter under flange finish diameter J

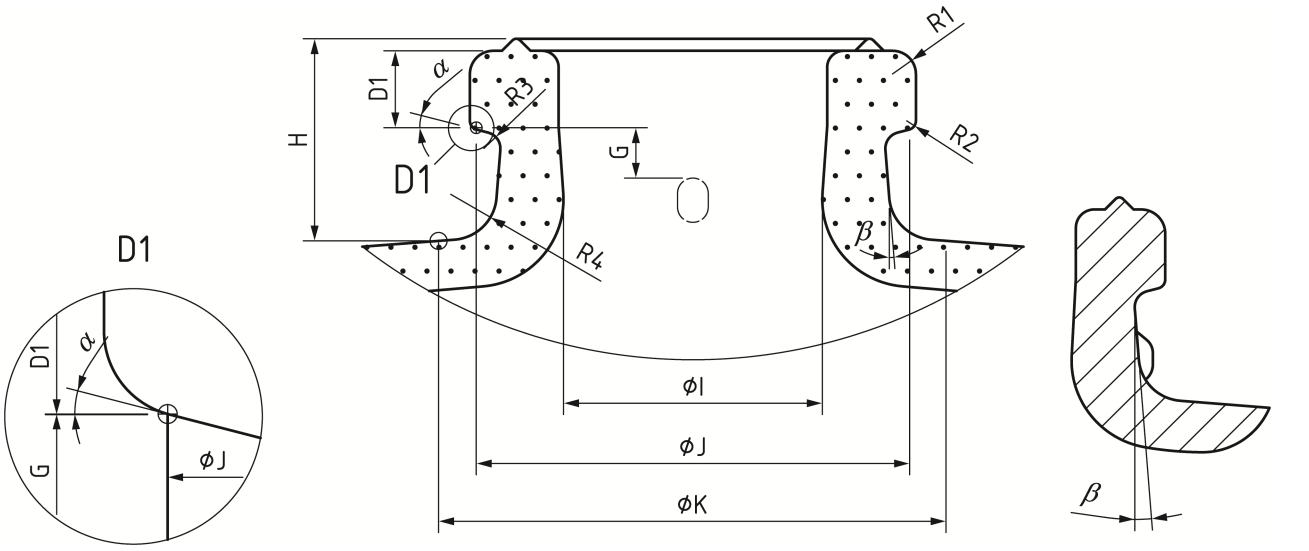
F height defining zone for checking diameter B max; when an anti-rotation lug is present measurement to be made at 90° to the lug

G minimum height of the lug, from under the flange finish to upper edge of the lug



**Figure 1 — A to G dimensions of neck finish for diameter 13 mm to 20 mm, moulded glass**

Dimensions in millimetres




| Name of the neck finish | H min | I min | J | K | α | | β | R1 min/max | R2 max | R3 max | R4 min |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **13** | 7,1 | 7,8 | 12,7 | 15,18 | | | | 0,3/0,7 | 0,5 | 0,6 | |
| **15** | 6,9 | 8,8 | 14,7 | 17,25 | | | | | | 0,8 | |
| **17** | 9,1 | 9 | 16,2 | 18,85 | 15° | $^{+5°}_{-10°}$ | 5° | 0,3/0,8 | 0,6 | 1 | 1,5 |
| **18** | 9,4 | 10,2 | 17,9 | 20,48 | | | | | | | |
| **20** | 9,2 | 10,2 | 19,3 | 22,15 | | | | | | | |



**Key**

H height at diameter K corresponding to a standard skirt
This may be adjusted, if necessary, with a tolerance of ± 0,3 mm for particular designs.
J reference diameter for measuring the flange finish height D1
K reference diameter for measuring the overall neck height H
β neck cone angle
optional use depending on agreement with glass manufacturer

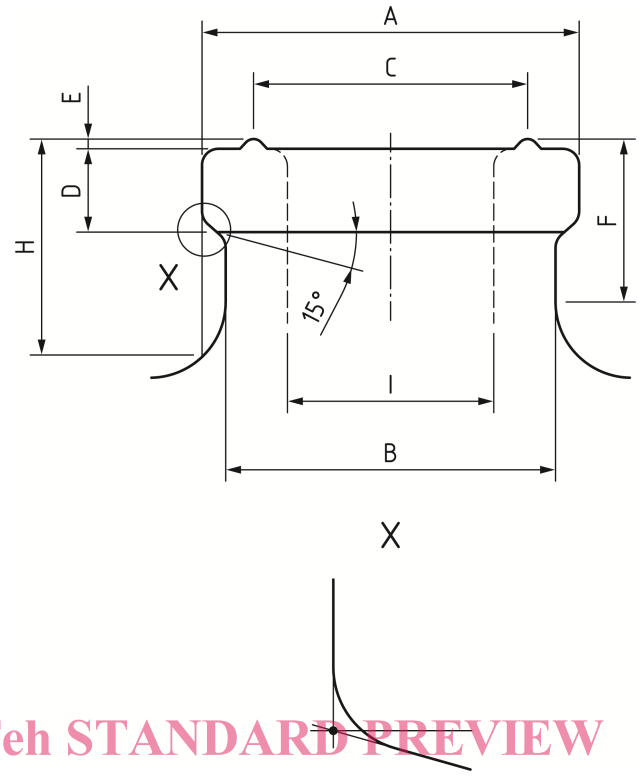
**Figure 2 — Complementary dimensions of neck finish for diameter 13 mm to 20 mm, moulded glass**

## 4.2 Neck finish diameter 11 mm

The dimensions of a moulded glass aerosol or spray glass container with a neck finish diameter of 11 mm shall conform to Figure 3.

See Annex A for explanations of the symbols.

Dimensions in millimetres






| Name of the neck finish | Ø A | | Ø B max | Ø C | D | | E | F min | H min | Ø I min |
|---|---|---|---|---|---|---|---|---|---|---|
| **11** | 11,0 | $^{0}_{-0,3}$ | 9,7 | 8,0 | 2,5 | ±0,2 | 0,3 | 5,0 | 6,2 | 6,1 |



**Key**

B neck diameter under flange finish at height F

D construction dimension given on an indicative basis for mould production

F height defining zone for checking diameter B max; when an anti-rotation lug is present measurement to be made at 90° to the lug

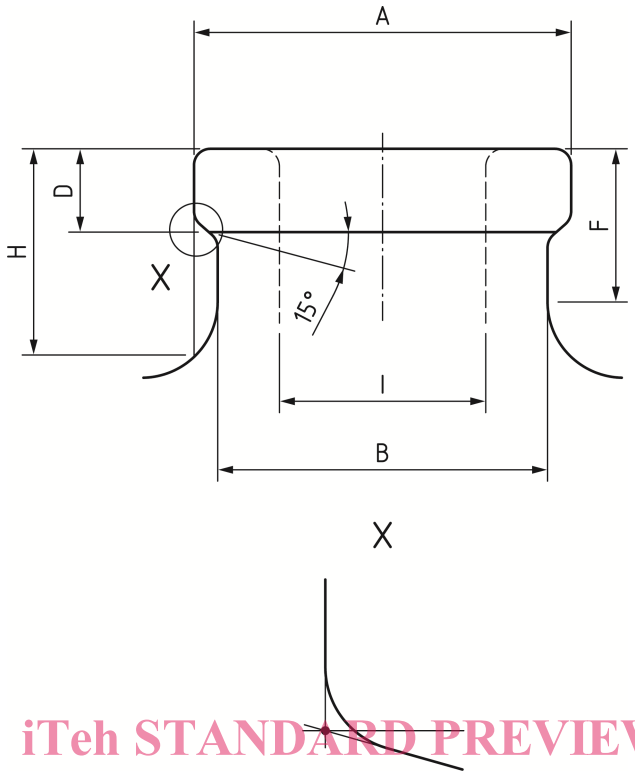
H height of the neck at flange finish diameter (11 mm). This may be adjusted, if necessary, with a tolerance of ± 0,3 mm for particular designs

**Figure 3 — Dimensions of neck finish diameter 11 mm, moulded glass**

## 5 Tubular glass

The dimensions of a tubular glass aerosol or spray glass container shall conform to Figure 4.

Dimensions in millimetres






| Name of the neck finish | Ø A | | Ø B max | D | | F min | H min | Ø I min |
|---|---|---|---|---|---|---|---|---|
| **11** | 11,0 | | 9,7 | 2,8 | | 5,0 | 6,2 | 6,1 |
| **13** | 13,3 | | 12,3 | 2,8 | | 4,7 | 6,8 | 7,8 |
| **15** | 15,3 | +0,0<br>−0,3 | 13,3 | 3,0 | ±0,2 | 4,8 | 6,8 | 8,8 |
| **17** | 16,8 | | 14,0 | 3,9 | | 5,7 | 9,0 | 9,0 |
| **18** | 18,5 | | 16,9 | 3,0 | | 4,8 | 9,0 | 10,2 |
| **20** | 20 | +0,0<br>−0,4 | 17,8 | 3,6 | ±0,25 | 5,4 | 9,0 | 10,2 |



**Key**

B neck diameter under flange finish at height F

D construction dimension given on an indicative basis for mould production

H height of the neck at flange finish nominal diameter (Ø A)

**Figure 4 — Dimensions of neck finish for diameter 11 mm to 20 mm, tubular glass**