

Glass packaging - Screw finishes for pressure capsules
- Part 1: Returnable glass MCA 2 finish

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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English Version

**Glass packaging - Screw finishes for pressure capsules - Part 1:
Returnable glass MCA 2 finish**

Emballage en verre - Bagues à vis pour capsules à
pression - Partie 1: Bague MCA 2 pour verre consigné

Verpackungen aus Glas - Schraubmundstücke für
Flaschen mit Innendruck - Teil 1: Mehrweg-MCA 2-
Mundstück

This European Standard was approved by CEN on 12 January 2013.

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Foreword

This document (EN 16291-1:2013) 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of an identical text or by endorsement, at the latest by September 2013, and conflicting national standards shall be withdrawn at the latest by September 2013.

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.

EN 16291, *Glass packaging — Screw finishes for pressure capsules*, consists of the following parts:

- *Part 1: Returnable glass MCA 2 finish;*
- *Part 2: One way glass MCA 2 finish.*

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

This document is based on CE.T.I.E. (International Technical Centre for Bottling and related Packaging) data sheet GME 320 [1].

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

1 Scope

This European Standard specifies the dimensions of the screw finish for glass containers designated MCA 2 for returnable glass.

2 Terms and definitions

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

2.1

MCA

(glass) finish designed for the closure of pressurised or vacuum liquids with a tamper-evident closure (metal or plastic)

3 Dimensions

The design and dimensions of the finish shall be as shown in Table 1 and Figures 1, 2, 3, 4 and 5.

Table 1 – Design and dimensions of the finish

Pitch	β	TPI	Ø cutter
3,175 mm	2° 12'	8	12,5 mm
β = Helix angle or angle of fixture to cutter. NOTE TPI = Threads per Inch. One inch is equal to 25,4 mm.			

The $\tan \beta$ of helix angle for cutter is calculated via the following formula:

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

where

T is the thread diameter;

E is the wall diameter of threaded finish.

The average of the maximum and minimum of "L" diameter is as close as possible to "L" nominal.

The mean diameter $L = \frac{\text{diameter max} + \text{diameter min}}{2}$ is in the tolerance of $\pm 0,2$ mm.

Optional: depressed thread at mould parting line (see EN 16292).