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Aerosol containers — Tinplate containers — Dimensions of two and three-piece cans



BS EN 15007:2017 BRITISH STANDARD

National foreword

This British Standard is the UK implementation of EN 15007:2017. It supersedes BS EN 15007:2006, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PKW/0/-/8, Packaging - Metals.

A list of organizations represented on this committee can be obtained on request to its secretary.

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ISBN 978 0 580 93221 2

ICS 55.130

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 July 2017.

Amendments/corrigenda issued since publication

Date Text affected

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 15007

March 2017

ICS 55.130

Supersedes EN 15007:2006

English Version

Aerosol containers - Tinplate containers - Dimensions of two and three-piece cans

Récipients pour aérosols - Récipients en fer-blanc -Dimensions des boîtiers deux et trois pièces Aerosolpackungen - Weißblechbehälter - Maße von zwei- und dreiteiligen Behältern

This European Standard was approved by CEN on 7 February 2017.

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BS EN 15007:2017 **EN 15007:2017 (E)**

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European foreword

This document (EN 15007:2017) 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of an identical text or by endorsement, at the latest by September 2017, and conflicting national standards shall be withdrawn at the latest by September 2017.

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 15007:2006.

This draft European Standard is one of a package of 10 related standards with the following titles:

- EN 14847, Aerosol containers Tinplate containers Dimensions of the 25,4 mm aperture;
- EN 14848, Aerosol containers Metal containers with 25,4 mm aperture Dimensions of valve cups;
- EN 14849, Aerosol containers Glass containers Dimensions of aerosol valve ferrules;
- EN 14850, Aerosol containers Metal containers with 25,4 mm aperture Measurement of contact height;
- EN 14854, Aerosol containers Glass containers Dimensions of the neck finish;
- EN 15006, Metal aerosol containers Aluminium containers Dimensions of the 25,4 mm aperture;
- EN 15007, Aerosol containers Tinplate containers Dimensions of two and three-piece cans;
- EN 15008, Aerosol containers Aluminium containers Dimensions of one-piece cans with 25,4 mm aperture;
- EN 15009, Aerosol containers Compartmented aerosol containers;
- EN 15010, Aerosol containers Aluminium containers Tolerances of the fundamental dimensions in connection with the clinch.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

EN 15007:2017 (E)

1 Scope

This European Standard specifies the dimensions of two and three-piece tinplate aerosol containers with nominal brimful capacities.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 14847, Aerosol containers - Tinplate containers - Dimensions of the 25,4 mm aperture

3 Requirements for dimensions of the containers

Necked-in containers shall conform to Figure 1 and Table 1. Straight-line containers shall conform to Figure 2 and Table 2.

NOTE The shape of containers need not necessarily correspond exactly to the figures as long as the specified dimensions conform.

It is recommended that aerosol containers be designated by:

- 1) their nominal brimful capacity (C₂), in millilitres;
- 2) their characteristic diameters, in millimetres;
- 3) their characteristic height (H_1) , in millimetres.

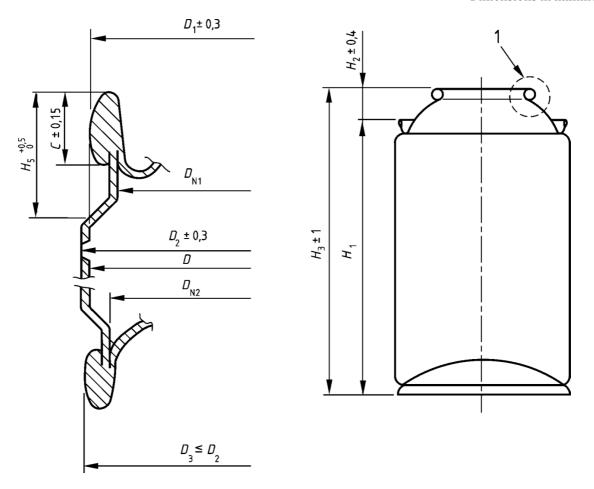
In addition, the nominal diameters of the top and bottom ends for necked-in containers should be included in the designation.

EXAMPLES

straight-sided cans: $C_2/D/H_1$;

necked-in cans with different top and bottom diameters: $C_2/D/D_{N1}/D_{N2}/H_1$.

Dimensions in millimetres



Key

1 aperture (in accordance with EN 14847)

 $\ \, \textbf{Figure 1-Necked-in containers} \\$

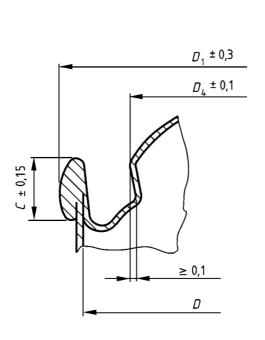
 $Table \ 1 - Nominal \ brimful \ capacities \ and \ dimensions \ for \ necked-in \ containers$

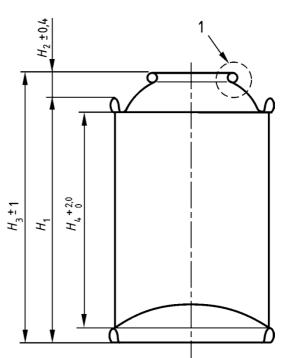
Brimful capacity ^a			Nom	inal fill	Nominal dimensions										
c_2				V	Body	Тор	Bottom								
		liquefied	compressed		end	end									
nom	min	max.	gas ^b	gas ^C	D	D_{N1}	D_{N2}	H ₁	H ₂	H_3	<i>D</i> ₁	С	H ₅	<i>D</i> ₂	
ml	ml	ml	ml	ml	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
140	134	146	100	75	45	41	42	96	5,6	101,6	43,6	2,9	5,3	45,2	
175	169	181	125	100	45	41	42	118	5,6	123,6	43,6	2,9	5,3	45,2	
210	204	216	150	125	45	41	42	140	5,6	145,6	43,6	2,9	5,3	45,2	
240	233	247	175	135	45	41	42	158	5,6	163,6	43,6	2,9	5,3	45,2	
270	262	278	200	150	45	41	42	178	5,6	183,6	43,6	2,9	5,3	45,2	
210	204	216	150	125	49	45	46 or ₄₇ d	119	7,0	126,0	47,8	2,9	5,5	49,3	
270	262	278	200	150	49	45	46 or ₄₇ d	151	7,0	158,0	47,8	2,9	5,5	49,3	
305	297	313	225	175	49	45	46 or ₄₇ d	169	7,0	176,0	47,8	2,9	5,5	49,3	
335	325	345	250	200	49	45	46 or ₄₇ d	185	7,0	192,0	47,8	2,9	5,5	49,3	
405	393	417	300	250	49	45	46 or ₄₇ d	222	7,0	229,0	47,8	2,9	5,5	49,3	
140	134	146	100	75	52	48	50	72	8,0	80,0	50,7	3,2	5,6	52,7	
175	169	181	125	100	52	48	50	88	8,0	96,0	50,7	3,2	5,6	52,7	
210	204	216	150	125	52	48	50	105	8,0	113,0	50,7	3,2	5,6	52,7	
270	262	278	200	150	52	48	50	132	8,0	140,0	50,7	3,2	5,6	52,7	
335	325	345	250	200	52	48	50	161	8,0	169,0	50,7	3,2	5,6	52,7	
405		417	300	250	52	48	50	195	8,0	203,0	50,7	3,2	5,6	52,7	
520	507	533	400	300	52	48	50	244	8,0	252,0	50,7	3,2	5,6	52,7	
270	262	278	200	150	57	52	54	110	9,5	119,5	55,5	3,3	6,0	57,6	
335	325	345	250	200	57	52	54	136	9,5	145,5	55,5	3,3	6,0	57,6	
405	393	417	300	250	57	52	54	164	9,5	173,5	55,5	3,3	6,0	57,6	
520		533	400	300	57	52	54	207	9,5	216,5	55,5	3,3	6,0	≤ 57,6	
650	637	663	500	400	57	52	54	257	9,5	266,5	55,5	3,3	6,0	57,6	

Brimful capacity ^a			Nom	inal fill	Nominal dimensions											
c_2		V		Body	Top	Bottom end										
			liquefied	compressed		end	ena									
nom	min	max.	gas ^b	gas ^C	D	D_{N1}	D_{N2}	H_1	H ₂	Н3	<i>D</i> ₁	С	H ₅	<i>D</i> ₂		
ml	ml	ml	ml	ml	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm		
405	393	417	300	250	65	60	63	122	13,5	135,5	63,2	3,3	6,3	65,9		
520	507	533	400	300	65	60	63	157	13,5	170,5	63,2	3,3	6,3	65,9		
650	637	663	500	400	65	60	63	195	13,5	208,5	63,2	3,3	6,3	65,9		
800	784	816	600	500	65	60	63	240	13,5	253,5	63,2	3,3	6,3	65,9		
1 000	980	1 020	750	600	65	60	63	300	13,5	313,5	63,2	3,3	6,3	65,9		

- The minimum and maximum values have been calculated in accordance with EN ISO 90-3 [1].
- b Products propelled by liquefied gas.
- ^C Products propelled by compressed gases alone and products propelled by nitrous oxide or carbon dioxide alone or by mixtures of the two alone when the product has a Bunsen coefficient of 1,2 or less.
- d Depending on companies.

Dimensions in millimetres





Key

1 aperture (in accordance with EN 14847)

Figure 2 — Straight-sided containers

Table 2 — Nominal brimful capacity and dimensions for straight-line containers

Brimful capacity ^a			Non	ninal fill	Nominal dimensions									
	c_2			V				Тор	end					
			lique- fied	compressed			н ₂		Н3					
nom.	min.	max.	gasb	gas ^C	D	H ₁	low	high	low	high	H_4	D_1	D_4	c
ml	ml	ml	ml	ml	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
140	134	146	100	75	52	72	9,5	_	81,5	_	65	55,5	45,42	3,3
175	169	181	125	100	52	88	9,5	_	97,5	_	81	55,5	45,42	3,3
210	204	216	150	125	52	105	9,5	_	114,5	_	98	55,5	45,42	3,3
270	262	278	200	150	52	132	9,5	_	141,5	_	125	55,5	45,42	3,3
335	325	345	250	200	52	161	9,5	_	170,5	_	154	55,5	45,42	3,3
405	393	417	300	250	52	195	9,5	_	204,5	_	188	55,5	45,42	3,3
405	393	417	300	250	60	146	13,5	_	159,5	_	139	63,2 or 62,8 ^d	52,90	3,3
520	507	533	400	300	60	186	13,5	_	199,5	_	179	63,2 or 62,8 ^d	52,90	3,3
650	637	663	500	400	60	232	13,5	_	245,5	_	225	63,2 or 62,8 ^d	52,90	3,3
405	393	417	300	250	65	122	15,5 ^b	20,3 ^b	137,5	142,3	115	68,5 or 68,7 ^d	58,50	3,3
520	507	533	400	300	65	157	15,5 ^b	20,3 ^b	172,5	177,3	150	68,5 or 68,7 ^d	58,50	3,3
650	637	663	500	400	65	195	15,5 ^b	20,3 ^b	210,5	215,3	188	68,5 or 68,7 ^d	58,50	3,3
800	784	816	600	500	65	240	15,5 ^b	20,3 ^b	255,5	260,3	233	68,5 or 68,7 ^d	58,50	3,3
1 000	980	1 020	750	600	65	300	15,5 ^b	20,3 ^b	315,5	320,3	293	68,5 or 68,7 ^d	58,50	3,3

a The minimum and maximum values have been calculated in accordance with EN ISO 90-3 [1].

b Products propelled by liquefied gas.

^C Products propelled by compressed gases alone and products propelled by nitrous oxide or carbon dioxide alone or by mixtures of the two alone when the product has a Bunsen coefficient of 1,2 or less.

^d Depending on companies.

Bibliography

[1] EN ISO 90-3, Light gauge metal containers - Definitions and determination of dimensions and capacities - Part 3: Aerosol cans (ISO 90-3)



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