BS ISO 4107:2010



BSI Standards Publication

Commercial vehicles — Wheel-hub attachment dimensions

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BS ISO 4107:2010 BRITISH STANDARD

National foreword

This British Standard is the UK implementation of ISO 4107:2010. It supersedes BS AU 50-2.2A:1984 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee AUE/4, Tyres and wheels for motor vehicles.

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

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ISBN 978 0 580 62541 1

ICS 43.040.50

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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 August 2010

Amendments issued since publication

Date Text affected

INTERNATIONAL STANDARD

ISO 4107:2010 ISO 4107

Fourth edition 2010-07-15

Commercial vehicles — Wheel-hub attachment dimensions

Véhicules utilitaires — Caractéristiques dimensionnelles de la fixation de la roue sur le moyeu



Reference number ISO 4107:2010(E)

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ISO 4107 was prepared by Technical Committee ISO/TC 22, Road vehicles, Subcommittee SC 19, Wheels.

This fourth edition cancels and replaces the third edition (ISO 4107:1998), which has been technically revised to include aluminium wheels and to add tolerances and modifications to the existing dimensions.

Introduction

This International Standard was developed in response to requests to establish uniform wheel-hub interface dimensions used on vehicles with flat attachment-style wheel mountings. There are other dimensional and performance characteristics of the wheel system that also need to be evaluated to ensure proper usage on a vehicle.

Commercial vehicles — Wheel-hub attachment dimensions

1 Scope

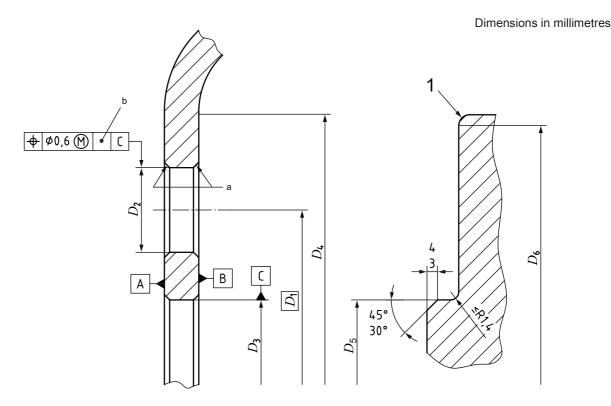
This International Standard specifies the dimensions necessary for the attachment of a commercial road vehicle wheel on the hub of the vehicle whose fixing has six, eight or ten stud holes.

This International Standard considers the flat attachment type with centring on central bore, which is the recommended type for future equipment. Other types are currently in use.

The specifications do not imply that the wheel is interchangeable from one vehicle to another.

2 Flat attachment with centring on central bore

The dimensions of the wheel and hub shall be as specified in Figure 1 and Table 1.



Key

1 sharp edge broken by radius or chamfer

NOTE The wheel support is shown on the right for information.

- a Break sharp edge.
- b A or B.

Figure 1 — Dimensions of wheel and hub

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Table 1 — Dimensions

Dimensions in millimetres

| | Bolt circle diameter | Bolt hole diameter | Central bore diameter ^a | | Disc flat diameter | Stud ^b | Wheel support ^b | |
|--------------------|----------------------|--------------------------------|---------------------------------------|-----------|-----------------------|--------------------------|---|--------|
| Number of studs | D_1 | D_2 | D_3 | | D_4 | ļ | D_5 | D_6 |
| | | (⁺¹ ₀) | (+0,2) | | min. | | $\begin{pmatrix} 0 \\ -0,2 \end{pmatrix}$ | (+1 0) |
| | | | Ferrous | Aluminium | | | | |
| 6 | 205 | - 21 | 161 | 161,2 | 255 | 18 | 160,8 | 250 |
| | 245 | | 202 | 202,2 | 295 | | 201,8 | 290 |
| 8 | 222,25 | 24 | 164 | 164,2 | 280 | 20 | 163,8 | 277 |
| | 275 ^c | | 221 | 221,2 | 325 | | 220,8 | 320 |
| 10 | 285,75 | 26 | 220 | 220,2 | 345 | 22 | 219,8 | 340 |
| | 335 | | 281 | 281,2 | 390 | | 280,8 | 385 |

a Continuous centre bore chamfer $1,5^{+1}_{0} \times 45^{\circ}$ at least on contact side or on both sides.

b For information.

Optional construction: $D_2 = 26$ mm with 22 mm stud.

ICS 43.040.50

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