

---

---

**Commercial vehicles — Wheel–hub  
attachment dimensions**

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



**PDF disclaimer**

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2010

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office  
Case postale 56 • CH-1211 Geneva 20  
Tel. + 41 22 749 01 11  
Fax + 41 22 749 09 47  
E-mail [copyright@iso.org](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

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

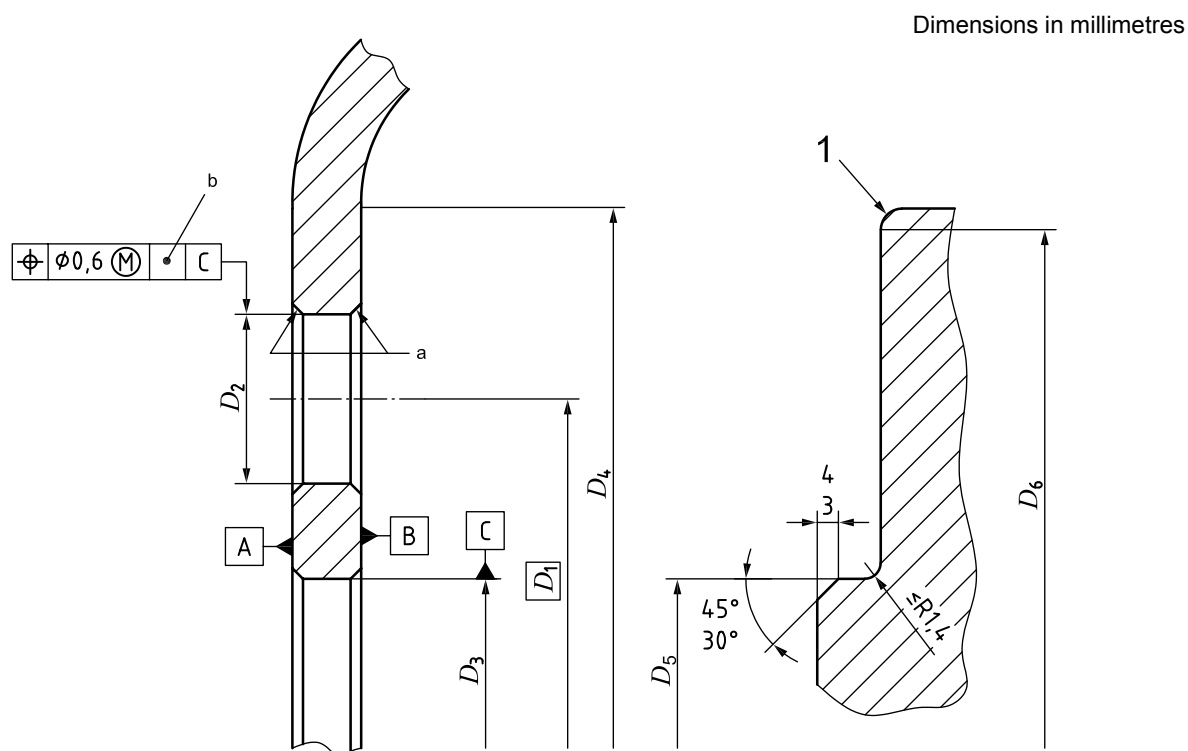
This International Standard specifies the dimensions necessary for the attachment of a commercial road vehicle wheel on the hub of the vehicle whose fixing has six, eight or ten stud holes.

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

Table 1 — Dimensions

Dimensions in millimetres

Number of studs	Bolt circle diameter $D_1$	Bolt hole diameter $D_2$ $\left( \begin{smallmatrix} +1 \\ 0 \end{smallmatrix} \right)$	Central bore diameter <sup>a</sup> $D_3$ $\left( \begin{smallmatrix} +0,2 \\ 0 \end{smallmatrix} \right)$		Disc flat diameter $D_4$ min.	Stud <sup>b</sup>	Wheel support <sup>b</sup>	
			Ferrous	Aluminium			$D_5$ $\left( \begin{smallmatrix} 0 \\ -0,2 \end{smallmatrix} \right)$	$D_6$ $\left( \begin{smallmatrix} +1 \\ 0 \end{smallmatrix} \right)$
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 <sup>c</sup>		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

<sup>a</sup> Continuous centre bore chamfer  $1,5^{+1}_0 \times 45^\circ$  at least on contact side or on both sides.  
<sup>b</sup> For information.  
<sup>c</sup> Optional construction:  $D_2 = 26$  mm with 22 mm stud.



---

---

**ICS 43.040.50**

Price based on 2 pages