
**Fork-lift trucks — Hook-on type
fork arms and fork arm carriages —
Mounting dimensions**

*Chariots élévateurs à fourche — Bras de fourche à tenons et tabliers
porte-fourches — Dimensions de montage*

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Foreword

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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 2328 was prepared by Technical Committee ISO/TC 110, *Industrial trucks*, Subcommittee SC 2, *Safety of powered industrial trucks*.

This fourth edition cancels and replaces the third edition (ISO 2328:2007), which has been technically revised.

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1 Scope

This International Standard specifies the dimensions of, and additional requirements for, fork carriers and hook-on type fork arms, to permit the interchangeability of these fork arms and/or other attachments, relative to the truck-rated capacity and fork arm type, on fork-lift trucks up to and including a rated capacity of 10 999 kg.

2 Normative references

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

ISO 2331, *Fork lift trucks — Hook-on type fork arms — Vocabulary*

ISO 3691-1, *Industrial trucks — Safety requirements and verification — Part 1: Self-propelled industrial trucks, other than driverless trucks, variable-reach trucks and burden-carrier trucks*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 2331 and ISO 3691-1 apply.

4 Requirements

4.1 Dimensions

The mounting dimensions of the fork arms and fork carrier for type A (short drop) and type B (long drop) fork arms (the position of the lower hook determining the type of fork arm) shall be in accordance with Figures 1, 2 and 3 and Tables 1 and 2. The fork arm removal/mounting slot on the lower fork carrier is optional and shall be in accordance with 4.3. Fork arm location slots to the dimensions specified in Table 2 shall be provided at a suitable spacing on the fork carrier. In order to locate attachments, one slot shall be situated on the top edge of the fork carrier centreline. However, when an offset lower slot is provided to avoid unintentional disengagement, then the lower slot shall be offset from the fork carrier centreline by dimension w (see Figure 1); this slot shall be 3 mm deeper than k_2 (see Figure 3), to facilitate the attachment and fork arm mounting.

4.2 Stops

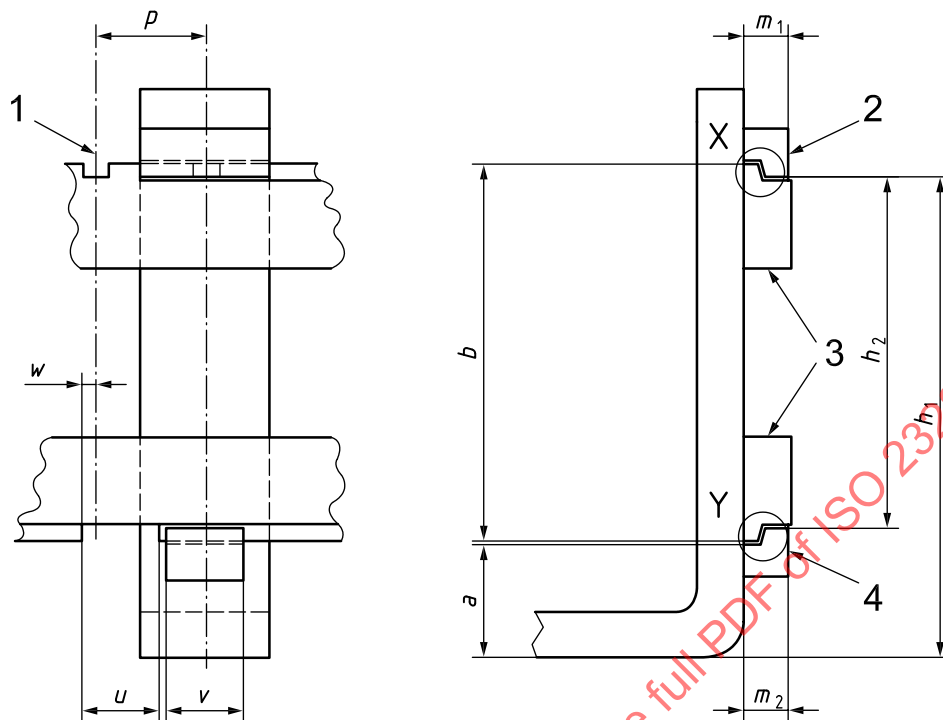
Stops shall be provided in order to prevent lateral disengagement of the fork arms from the extremities of the fork carrier. If these stops are not permanent, i.e. welded, then the instruction handbook shall contain warnings that the truck is not to be used if the stops are not correctly in place.

4.3 Slot on the lower carriage

If a fork arm removal/mounting slot is provided in the lower edge of the fork carrier, it shall be positioned as shown in Figure 3, that shown in the detailed view X–X being optional. If the positioning of the slots in the upper and lower fork carrier could enable the fork arm or attachment to become inadvertently disengaged from the carrier, then other means (e.g. mechanical) shall be provided to prevent this from occurring.

Where the exclusive means of preventing unintentional fork arm disengagement is by an offset lower slot, then the instruction handbook shall contain the following warning notice:

WARNING — If the fork/locking pin is not fully engaged, the fork could become unintentionally disengaged.



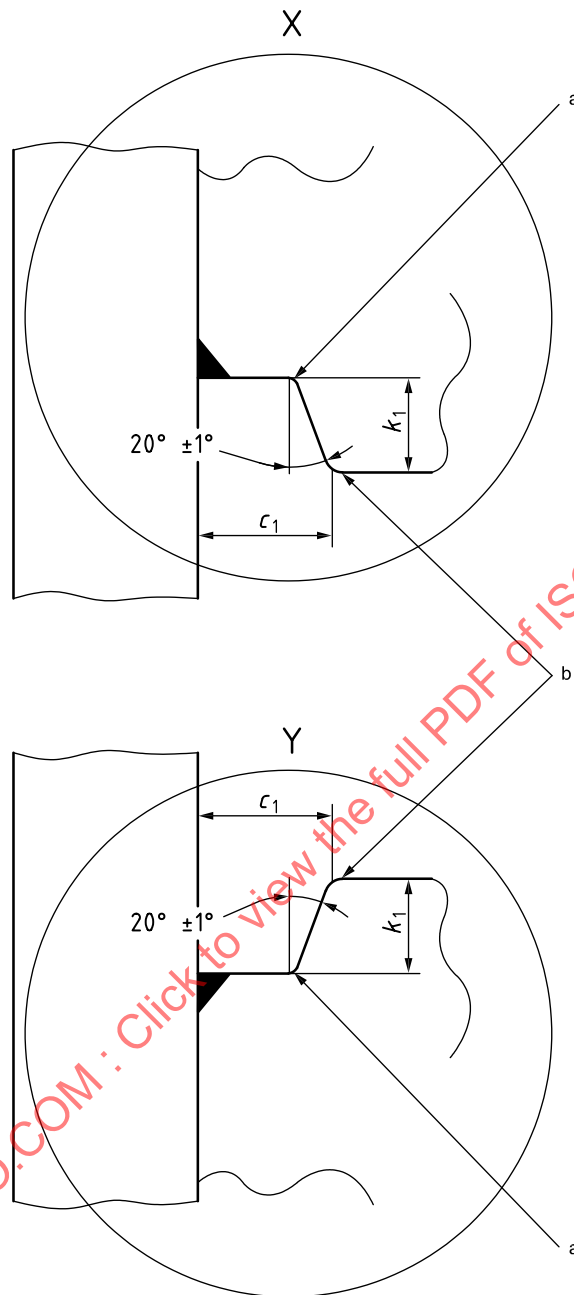
Key

- 1 carriage centreline
- 2 upper hook
- 3 fork carrier
- 4 lower hook

NOTE 1 For the values of the dimensions, see Tables 1 and 2.

NOTE 2 h_1 and h_2 are fork arm dimensions, a and b are fork carrier dimensions.

Figure 1 — Hook-on type fork arm mounted on fork carrier

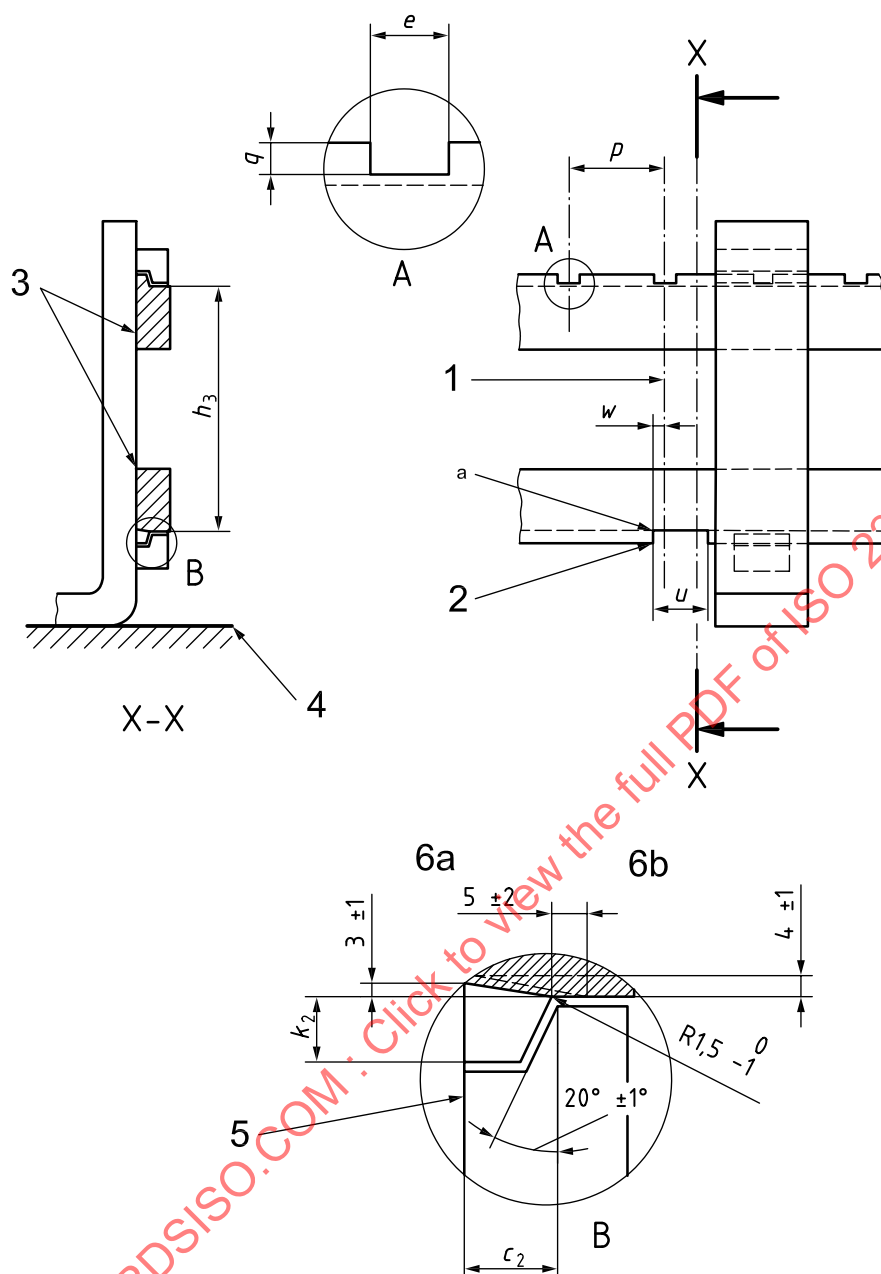
**Key**

- X detail of upper hook
Y detail of lower hook

NOTE For the values of the dimensions, see Table 1.

- a Upper and lower fork hooks may be rounded or chamfered for clearance (see Table 1).
b Maximum radius 1,0 mm.

Figure 2 — Fork arm hook detail



Key

- 1 carriage centreline
- 2 slot on right side when looking at front face of the fork arm carrier
- 3 hook-on type fork arm carrier
- 4 bottom of fork arm (ground level)
- 5 lower hook of fork arm or attachment lug
- 6a optional front slope for ease of attachment mounting
- 6b optional front square cut-out for ease of attachment mounting

NOTE For the values of the dimensions, see Tables 1 and 2.

^a Maximum radius 5 mm.

Figure 3 — Hook-on type fork arm carrier