
**Agricultural vehicles — Mechanical
connections on towed vehicles —**

Part 2:
Coupling ring 40 with socket

*Véhicules agricoles — Liaisons mécaniques sur véhicules remorqués —
Partie 2: Anneau d'attelage 40 avec douille*



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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 3.

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 part of ISO 5692 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 5692-2 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 4, *Tractors*.

ISO 5692 consists of the following parts, under the general title *Agricultural vehicles — Mechanical connections on towed vehicles*:

— *Part 2: Coupling ring 40 with socket*

Hitch-rings will be the subject of a future part 1 to ISO 5692.

Agricultural vehicles — Mechanical connections on towed vehicles —

Part 2: Coupling ring 40 with socket

1 Scope

This part of ISO 5692 specifies the requirements for vehicle coupling rings with a ring inside diameter of 40 mm for coupling with the drawbar coupling specified in ISO 6489-2, and for ensuring vehicle coupling with the necessary horizontal and vertical rotation angle.

This part of ISO 5692 is applicable to couplings where the vertical static load is not more than 2 000 kg and the dynamic horizontal load is not more than the D value of 120 kN.

NOTE For value D , see ISO 6489-2.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 5692. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 5692 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 286-1:1988, *ISO system of limits and fits — Part 1: Bases of tolerances, deviations and fits*

ISO 683-1:1987, *Heat-treatable steels, alloy steels and free-cutting steels — Part 1: Direct-hardening unalloyed and low-alloyed wrought steel in form of different black products*

ISO 2768-1:1989, *General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications*

ISO 6489-2:—¹⁾, *Agricultural vehicles — Mechanical connections between towed and towing vehicles — Part 2: Dimensions of drawbar coupling 40*

1) To be published. (Revision of ISO 6489-2:1980)

3 Dimensions

3.1 General

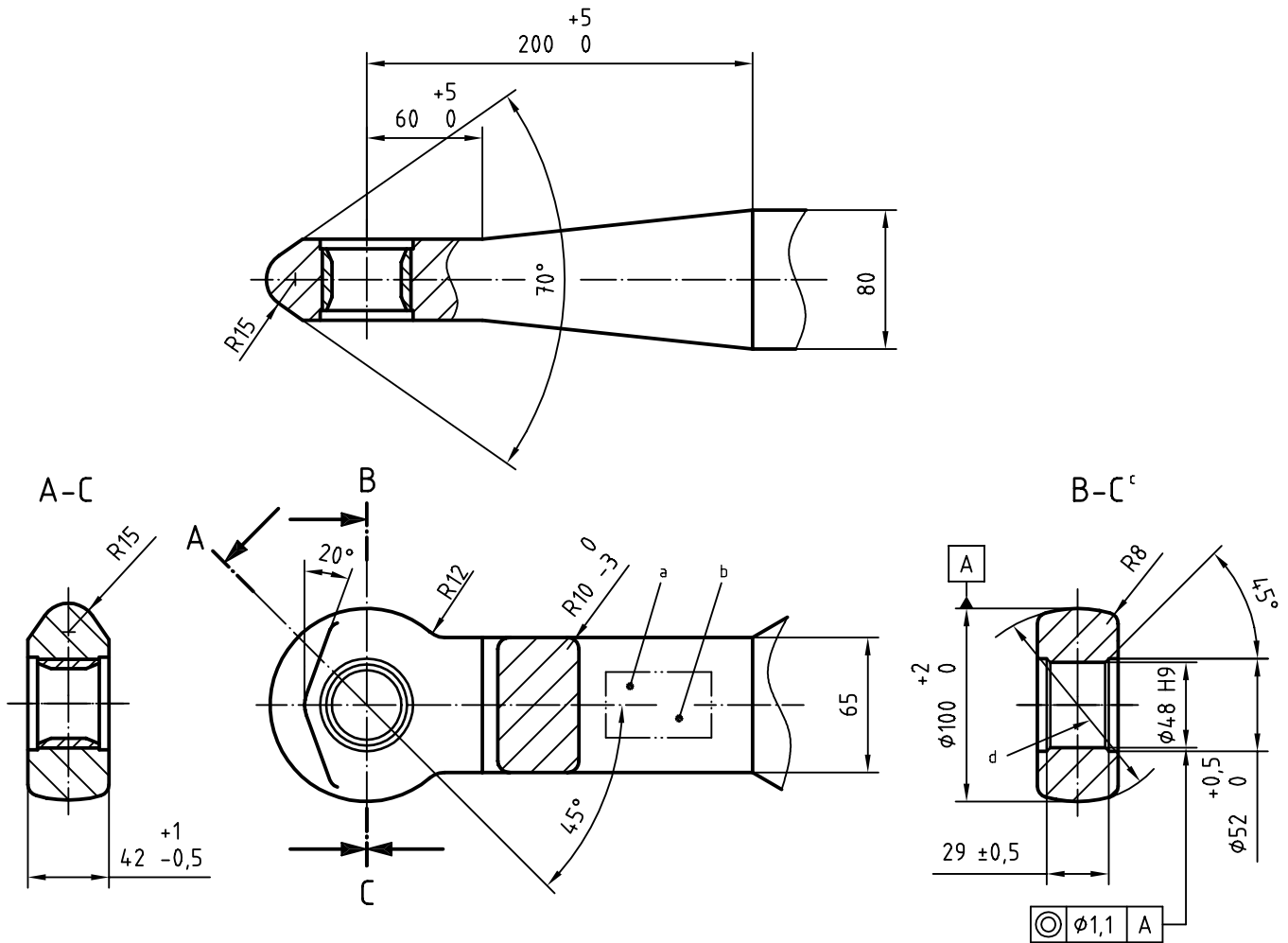
Details not specified in this part of ISO 5692 shall be chosen appropriately. Tolerances on dimensions without individual tolerance indications shall be chosen in accordance with tolerance class c specified in ISO 2768-1:1989.

Limits and fits shall be in accordance with ISO 286-1.

3.2 Dimensions of coupling ring

The coupling ring shall be made to shape A or shape B as shown in Figure 1 and Figure 2, respectively.

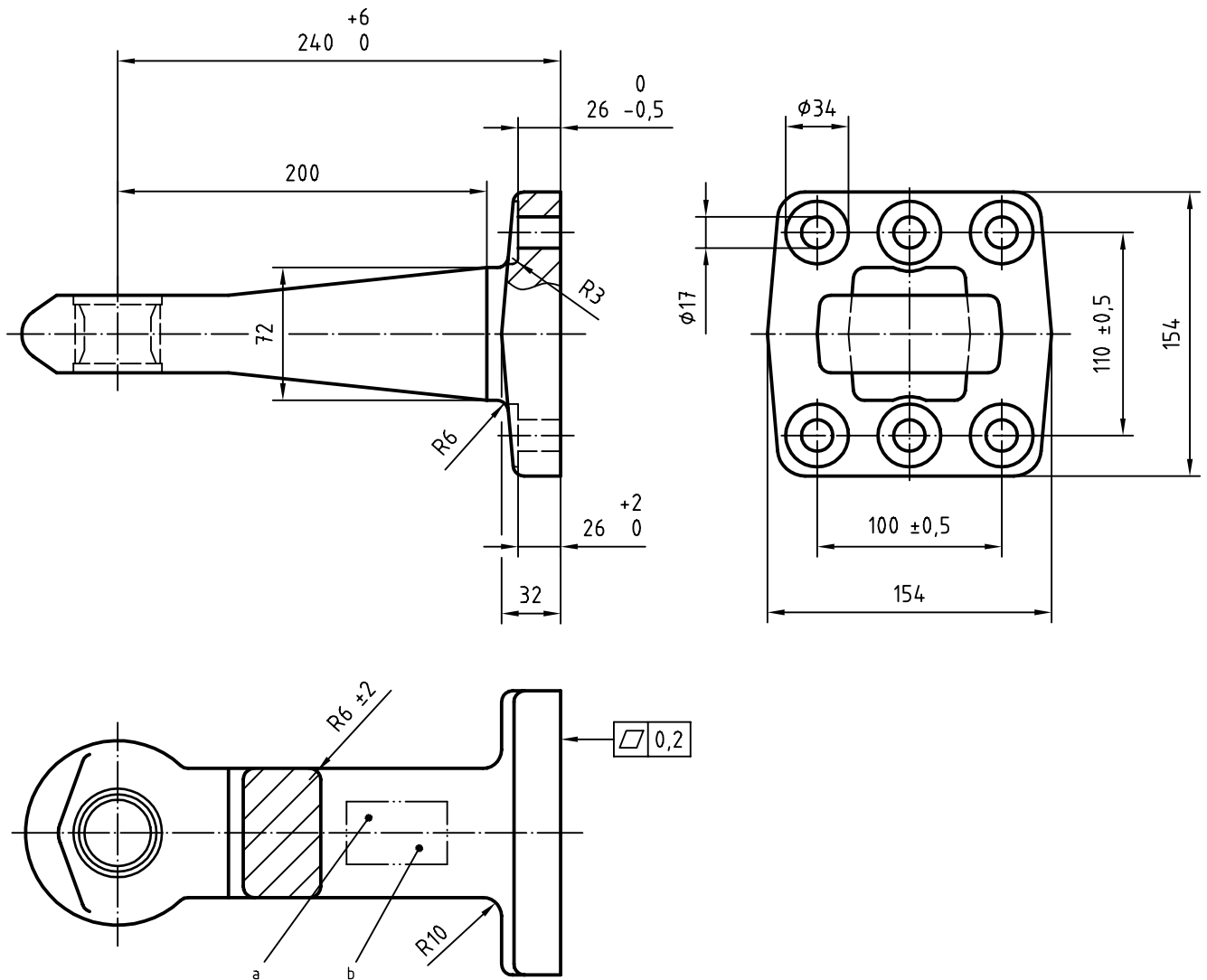
Dimensions in millimetres



- a Identification of this part of ISO 5692.
- b Mark of manufacturer.
- c Presented without socket.
- d Spherical.

Figure 1 — Ring with welding end — Shape A

Dimensions in millimetres



NOTE Other dimensions are as for shape A.

- a Identification of this part of ISO 5692.
- b Mark of manufacturer.

Figure 2 — Ring with flange end — Shape B

3.3 Dimension for sockets

Sockets shall be made to the dimensions shown in Figure 3.

4 Material

4.1 Ring

4.1.1 Coupling ring shape A

Instructions on the welding procedure shall be provided with each ring.

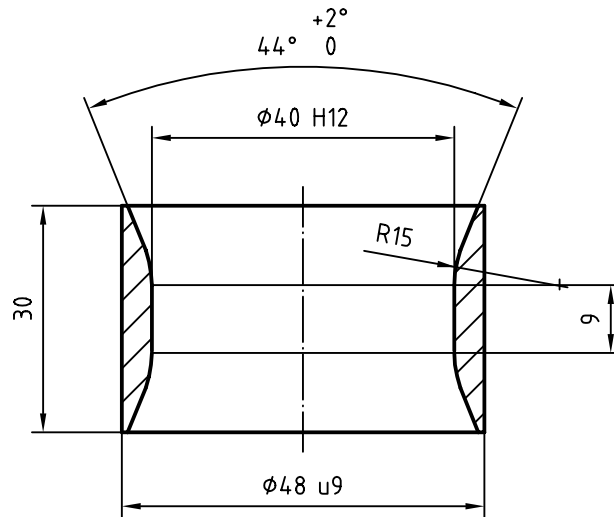


Figure 3 — Socket

Weldable material shall be chosen by the manufacturer. The welding procedure shall be chosen so that the hardness increase at the welding contact surfaces does not exceed 300 HV 30 (i.e. preheating for welding to $\approx 250\text{ }^{\circ}\text{C}$).

4.1.2 Ring shape B

At the manufacturer's discretion.

4.2 Socket

The socket shall be of CT ISO 683-1 42CrMo 4 steel.

5 Requirements

The socket shall not be welded or slotted. It shall be connected to the ring body, so that it cannot be moved during travelling.

The ring shapes A and B shall be tested for cracks using a test procedure of the manufacturer's choice.

6 Marking

The identification of this part of ISO 5692 and the manufacturer's mark on the drawbar shall be attached to the coupling ring in a durable and clearly legible way (see Figure 1 and Figure 2).

7 Designation

EXAMPLE 1 Designation of a coupling ring 40 shape A with socket:

Coupling ring ISO 5692-2-A-40

EXAMPLE 2 Designation of a socket for a coupling ring 40:

Socket ISO 5692-2-40

