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SS-ISO 5692-1:2004

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Utgåva 1

**Lantbruksmaskiner – Dragkoppling för bogserade
vagnar –**

Del 1: Mått för dragöglor (ISO 5692-1:2004, IDT)

**Agricultural vehicles – Mechanical connections
on towed vehicles –**

Part 1: Dimensions for hitch rings
(ISO 5692-1:2004, IDT)

ICS 65.060.10

Språk: engelska

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Den internationella standarden ISO 5692-1:2004 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av ISO 5692-1:2004.

The International Standard ISO 5692-1:2004 has the status of a Swedish Standard. This document contains the official English version of ISO 5692-1:2004.

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Foreword

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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 5692-1 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 4, *Tractors*.

This first edition of ISO 5692-1, together with ISO 5692-2:2002, cancels and replaces ISO 5692:1979 which has been technically revised.

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

- *Part 1: Dimensions for hitch rings*
- *Part 2: Coupling ring 40 with socket*

Agricultural vehicles — Mechanical connections on towed vehicles —

Part 1: Dimensions for hitch rings

1 Scope

This part of ISO 5692 specifies the requirements for the attachment of agricultural non-balanced trailers and implements by means of hitch rings to the rear of the towing vehicle equipped with either a hook as specified in ISO 6489-1, or a piton-type coupling as specified in ISO 6489-4. Its purpose is to ensure the interchangeability of mechanical connections on agricultural towed vehicles.

This part of ISO 5692 is applicable to rings whose coupling point is below the centre-line of the rear axle and below the power take-off (PTO) of the tractor.

NOTE Other International Standards are under development for rings coupled above the PTO.

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 6489-1, *Agricultural vehicles — Mechanical connections between towed and towing vehicles — Part 1: Dimensions of hitch-hooks*

ISO 6489-4, *Agricultural vehicles — Mechanical connections between towed and towing vehicles — Part 4: Dimensions of piton-type coupling*

3 Interchangeability dimensions

3.1 General

The hitch ring and the shank shall have the dimensions shown in Figures 1 and 2. Interchangeability is ensured provided that the attachment on the towing vehicle is in accordance with ISO 6489-1 or ISO 6489-4.

Dimensions in millimetres

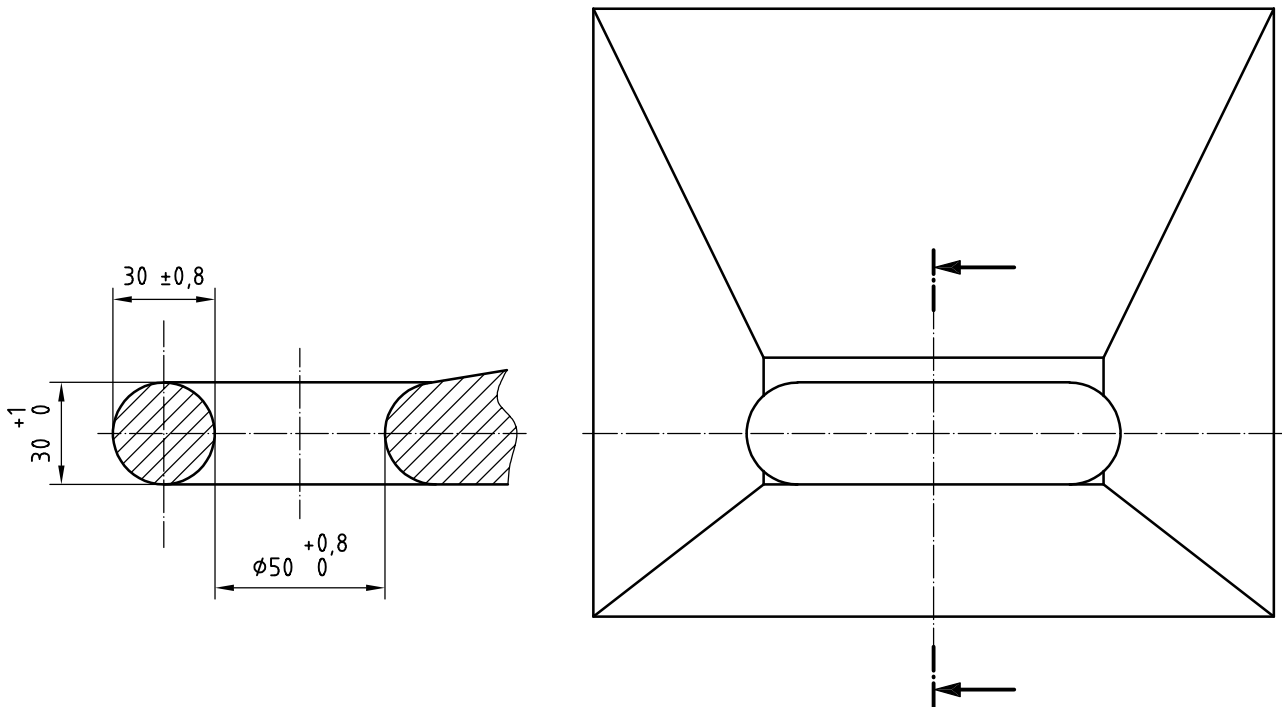


Figure 1 — Hitch ring dimensions

3.2 Trailer shank travel angles

When the trailer shank fitted with the specified hitch ring is fixed to the tractor attachment, the shank shall be free to turn so that the angles formed with the horizontal situated in the tractor's plane of symmetry and passing through the coupling point have the following minimum values.

- Angle of yaw: rotation around a vertical axis passing through the coupling point, minimum value of 60° on both sides.
- Angle of pitch: rotation around a horizontal axis passing through the coupling point and perpendicular to the vehicle's longitudinal plane of symmetry, minimum value 20° top and bottom.

Allowance should be made for the towing vehicle being up to $\pm 3^\circ$ from horizontal, due to front/rear tyre sizes.

- Angle of roll: rotation around a horizontal axis passing through the coupling point and located in the vehicle's plane of symmetry, minimum value 20° top and bottom.

4 Constructional requirements

Hitch rings in accordance with this part of ISO 5692 shall be substantially toroidal and shall be manufactured by forging. Shanks shall be forged or machined or both.

The hitch ring shall be fixed on the shank. The hitch hook or piton-type coupling on the tractor shall be designed to allow the travel angles specified in 3.2.

In addition to these requirements relating to fixed hitch rings for towed vehicles, only the towed member (i.e. hitch ring and shank) shall have the option of providing rotational freedom of up to 360° around the shank's horizontal longitudinal axis (roll). Limitation of rotation away from the horizontal, or bias towards the hitch ring remaining horizontal, is optional.