

# SVENSK STANDARD

## SS-ISO 6489-5:2011

Fastställt/Approved: 2011-08-22  
Publicerad/Published: 2011-09-14  
Utgåva/Edition: 1  
Språk/Language: engelska/English  
ICS: 65.060.10

---

### **Lantbruksmaskiner – Kopplingar mellan dragfordon och bogserade maskiner – Del 5: Specifikation för fixerad dragkoppling (ISO 6489-5:2011, IDT)**

### **Agricultural vehicles – Mechanical connections between towed and towing vehicles – Part 5: Specifications for non-swivel clevis couplings (ISO 6489-5:2011, IDT)**

This preview is downloaded from [www.sis.se](http://www.sis.se). Buy the entire standard via <https://www.sis.se/std-81102>

# Standarder får världen att fungera

*SIS (Swedish Standards Institute) är en fristående ideell förening med medlemmar från både privat och offentlig sektor. Vi är en del av det europeiska och globala nätverk som utarbetar internationella standarder. Standarder är dokumenterad kunskap utvecklad av framstående aktörer inom industri, näringsliv och samhälle och befrämjar handel över gränser, bidrar till att processer och produkter blir säkrare samt effektiviserar din verksamhet.*

## Delta och påverka

Som medlem i SIS har du möjlighet att påverka framtida standarder inom ditt område på nationell, europeisk och global nivå. Du får samtidigt tillgång till tidig information om utvecklingen inom din bransch.

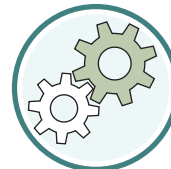
## Ta del av det färdiga arbetet

Vi erbjuder våra kunder allt som rör standarder och deras tillämpning. Hos oss kan du köpa alla publikationer du behöver – allt från enskilda standarder, tekniska rapporter och standardpaket till handböcker och onlinetjänster. Genom vår webbtjänst e-nav får du tillgång till ett lättnavigerat bibliotek där alla standarder som är aktuella för ditt företag finns tillgängliga. Standarder och handböcker är källor till kunskap. Vi säljer dem.

## Utveckla din kompetens och lyckas bättre i ditt arbete

Hos SIS kan du gå öppna eller företagsinterna utbildningar kring innehåll och tillämpning av standarder. Genom vår närhet till den internationella utvecklingen och ISO får du rätt kunskap i rätt tid, direkt från källan. Med vår kunskap om standarders möjligheter hjälper vi våra kunder att skapa verklig nytta och lönsamhet i sina verksamheter.

**Vill du veta mer om SIS eller hur standarder kan effektivisera din verksamhet är du välkommen in på [www.sis.se](http://www.sis.se) eller ta kontakt med oss på tel 08-555 523 00.**



# Standards make the world go round

*SIS (Swedish Standards Institute) is an independent non-profit organisation with members from both the private and public sectors. We are part of the European and global network that draws up international standards. Standards consist of documented knowledge developed by prominent actors within the industry, business world and society. They promote cross-border trade, they help to make processes and products safer and they streamline your organisation.*

## Take part and have influence

As a member of SIS you will have the possibility to participate in standardization activities on national, European and global level. The membership in SIS will give you the opportunity to influence future standards and gain access to early stage information about developments within your field.

## Get to know the finished work

We offer our customers everything in connection with standards and their application. You can purchase all the publications you need from us - everything from individual standards, technical reports and standard packages through to manuals and online services. Our web service e-nav gives you access to an easy-to-navigate library where all standards that are relevant to your company are available. Standards and manuals are sources of knowledge. We sell them.

## Increase understanding and improve perception

With SIS you can undergo either shared or in-house training in the content and application of standards. Thanks to our proximity to international development and ISO you receive the right knowledge at the right time, direct from the source. With our knowledge about the potential of standards, we assist our customers in creating tangible benefit and profitability in their organisations.

**If you want to know more about SIS, or how standards can streamline your organisation, please visit [www.sis.se](http://www.sis.se) or contact us on phone +46 (0)8-555 523 00**



Den internationella standarden ISO 6489-5:2011 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av ISO 6489-5:2011.

The International Standard ISO 6489-5:2011 has the status of a Swedish Standard. This document contains the official version of ISO 6489-5:2011.

© Copyright/Upphovsrätten till denna produkt tillhör SIS, Swedish Standards Institute, Stockholm, Sverige. Användningen av denna produkt regleras av slutanvändarlicensen som återfinns i denna produkt, se standardens sista sidor.

© Copyright SIS, Swedish Standards Institute, Stockholm, Sweden. All rights reserved. The use of this product is governed by the end-user licence for this product. You will find the licence in the end of this document.

*Uppllysningar om sakinnehållet i standarden lämnas av SIS, Swedish Standards Institute, telefon 08-555 520 00. Standarder kan beställas hos SIS Förlag AB som även lämnar allmänna uppllysningar om svensk och utländsk standard.*

*Information about the content of the standard is available from the Swedish Standards Institute (SIS), telephone +46 8 555 520 00. Standards may be ordered from SIS Förlag AB, who can also provide general information about Swedish and foreign standards.*

Denna standard är framtagen av kommittén för Lantbruksmaskiner, SIS/TK 228.

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på [www.sis.se](http://www.sis.se) - där hittar du mer information.



## 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 6489-5 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 4, *Tractors*.

ISO 6489 consists of the following parts, under the general title *Agricultural vehicles — Mechanical connections between towed and towing vehicles*:

- *Part 1: Dimensions of hitch-hooks*
- *Part 2: Specifications for clevis coupling 40*
- *Part 3: Tractor drawbar*
- *Part 4: Dimensions of piton-type coupling*
- *Part 5: Specifications for non-swivel clevis couplings*



# Agricultural vehicles — Mechanical connections between towed and towing vehicles —

## Part 5: Specifications for non-swivel clevis couplings

### 1 Scope

This part of ISO 6489 specifies the requirements for non-swivel clevis couplings used for the attachment of agricultural trailers and implements equipped with a swivel hitch ring as specified in ISO 5692-3 to the rear of self-propelled agricultural vehicles.

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

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

ISO 5692-3:2011, *Agricultural vehicles — Mechanical connections on towed vehicles — Part 3: Swivel hitch rings*

### 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

#### 3.1

##### **non-swivel clevis coupling**

hitching device, not rotating around the horizontal longitudinal axis (roll), for the mechanical connection of trailers and implements

#### 3.2

##### **coupling reference centre**

point along the pin centreline crossing the horizontal symmetry centreline of the drawbar housing

#### 3.3

##### **D value**

*D*

mathematically established representative force for the horizontal component of the force acting on the coupling in the longitudinal axis of the machine

NOTE It is expressed in kilonewtons (kN).

### 3.4 vertical load on the coupling point

$S$   
load transmitted, under static conditions, on the reference centre of the mechanical coupling

NOTE It is expressed in kilograms (kg).

## 4 Constructional requirements

Constructional requirements not given in this part of ISO 6489 shall be specified as appropriate. Tolerances on dimensions without individual tolerance indications shall be in accordance with ISO 2768-1:1989, tolerance class c. Limits and fits shall be in accordance with ISO 286-1.

The dimensions of trailer or implement couplings of shapes w, x, y and z shall be in accordance with Figure 1 and Table 1.

## 5 Calculation of D value

The D value shall be calculated, in kilonewtons, using the following equation, where the values of  $m_r$  and  $m_t$  are known:

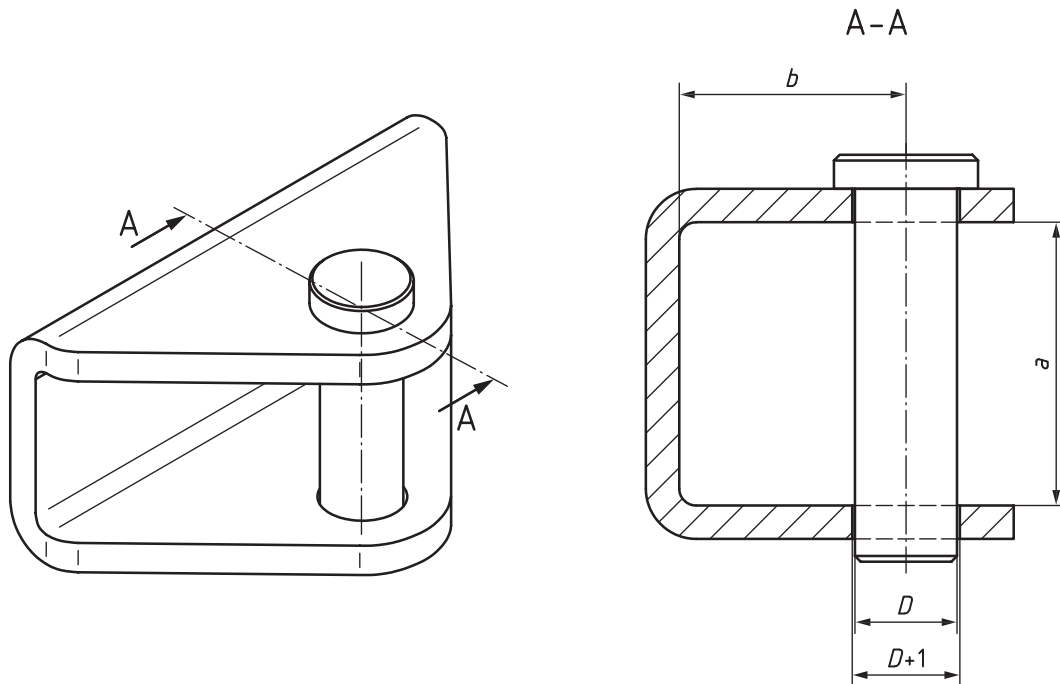
$$D = g \times \left( \frac{m_t \times m_r}{m_t + m_r} \right)$$

where

$g$  is the acceleration due to gravity, 9,81 m/s<sup>2</sup>;

$m_r$  is the allowable mass of the trailer or towed implement, in tonnes;

$m_t$  is the allowable total mass of the tractor or towing vehicle, in tonnes.



NOTE Dimensions are given in Table 1.

Figure 1 — Non-swivel clevis coupling