

---

---

**Tractors and machinery for agriculture  
and forestry — Auxiliary-power-  
transmission connector for the operator  
station**

*Tracteurs et matériels agricoles et forestiers — Connecteur de  
transmission d'énergie auxiliaire au poste de l'opérateur*



**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.

STANDARDSISO.COM : Click to view the full PDF of ISO 17612:2004

© ISO 2004

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 17612 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 4, *Tractors*.

## Introduction

This International Standard specifies an electrical connector for the transmission of auxiliary power within the operator station of enclosed agricultural machines. The specification thus established will allow manufacturers to provide both individual and multiple outlets in the cab. Typical applications include monitors, light-duty controllers, remote operating devices and miscellaneous off-the-shelf items. Only the application dimensions and electrical characteristics are covered.

Other electrical transmission connectors for agricultural tractors and machinery are specified in ISO/TR 12369. For this and other International Standards dealing with connectors for electrical power transmission from tractor to implement or other means, see the Bibliography.

STANDARDSISO.COM : Click to view the full PDF of ISO 17612:2004

# Tractors and machinery for agriculture and forestry — Auxiliary-power-transmission connector for the operator station

## 1 Scope

This International Standard specifies the essential interface dimensions of a connector and its plug for the transmission of 12 V electrical power within the enclosed operator station of agricultural tractors and machinery. The device is intended to be used as a non-environmentally sealed, convenient source for power auxiliary devices, providing a means for the operator to obtain electrical power without altering the tractor/machine electrical wiring harness. The maximum current capacity of the specified device is 30 A: it is not applicable to any other voltage system (6 V or 24 V).

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

## 3 Terms and definitions

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

### 3.1

#### **contact**

current-carrying element of the connector, either male or female

### 3.2

#### **pin**

male contact

### 3.3

#### **contact socket**

female contact

### 3.4

#### **power strip socket**

female half of the connector, integral to the power strip

### 3.5

#### **power strip plug**

male half of the connector, attached to the device to be powered

### 3.6

#### **connector**

complete mated assembly containing socket, plug, pins and contact sockets

**3.7**

**power strip**

connector containing one or more distribution positions

**3.8**

**switched current**

electrical current path containing a switching component between battery and power strip

**3.9**

**un-switched current**

electrical current path having an uninterrupted current path between battery and power strip

**3.10**

**auxiliary device**

device attached to the power strip plug

EXAMPLE Monitor, controller, communication device, computer.

## **4 Requirements**

### **4.1 Dimensional requirements**

#### **4.1.1 Power strip socket**

The connector shall consist of a base containing one or more sockets.

Each socket shall be covered with a lid, which shall be spring-loaded to close or have a detent to hold it in the closed position. The lid shall have symbols defining the contact positions and their respective use.

A typical example is shown in Figure 1, for reference purposes only.

The socket and pin spacing dimensions shall be in accordance with Figure 2.

Female contacts shall be of at least a tin-plated material designed to mate with the male contacts specified in Figure 3.

#### **4.1.2 Power strip plug**

Critical outside dimensions of the power strip plug shall be in accordance with Figure 4 to allow typical mating with the power strip socket.

Dimensions in millimetres

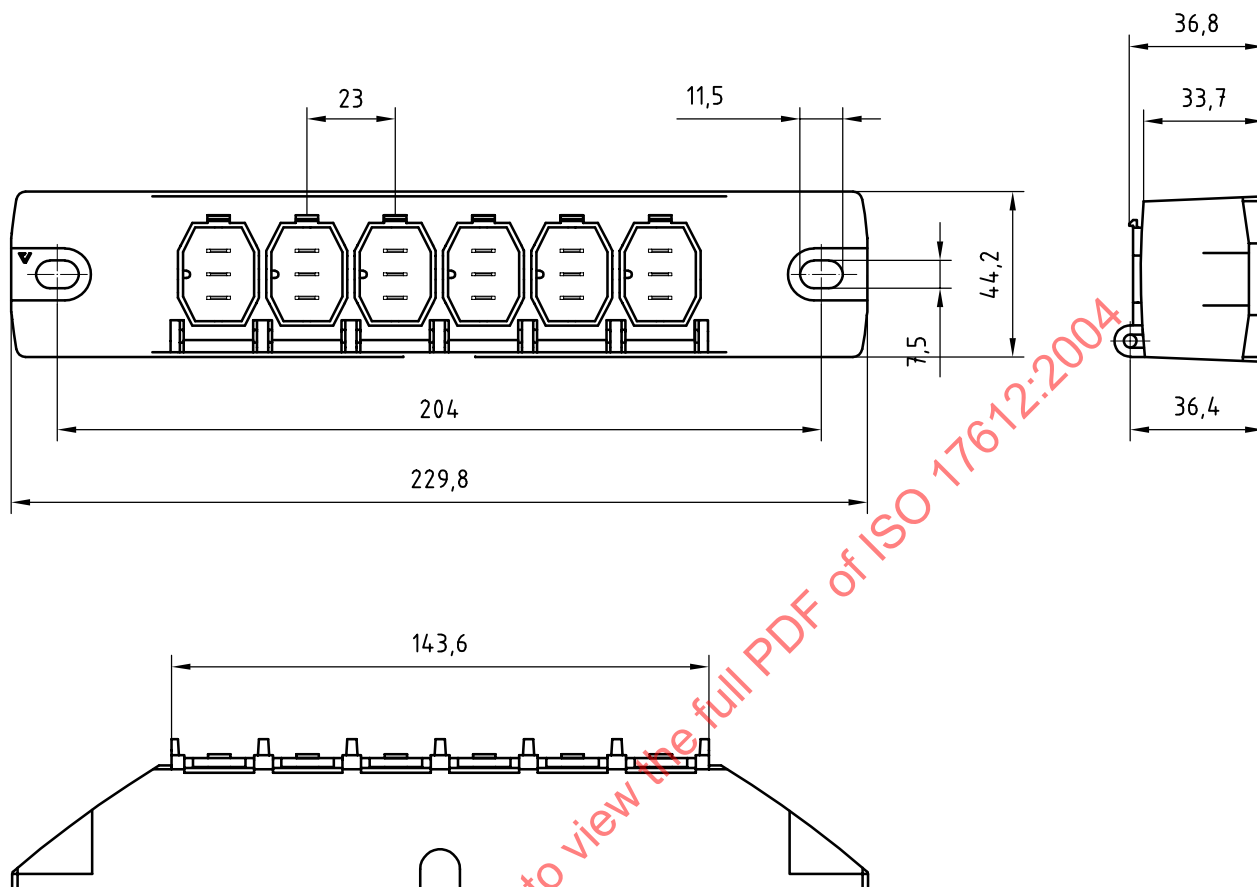


Figure 1 — Typical power strip socket (for information only)

Dimensions in millimetres,  
tolerances in accordance with ISO 2768-m

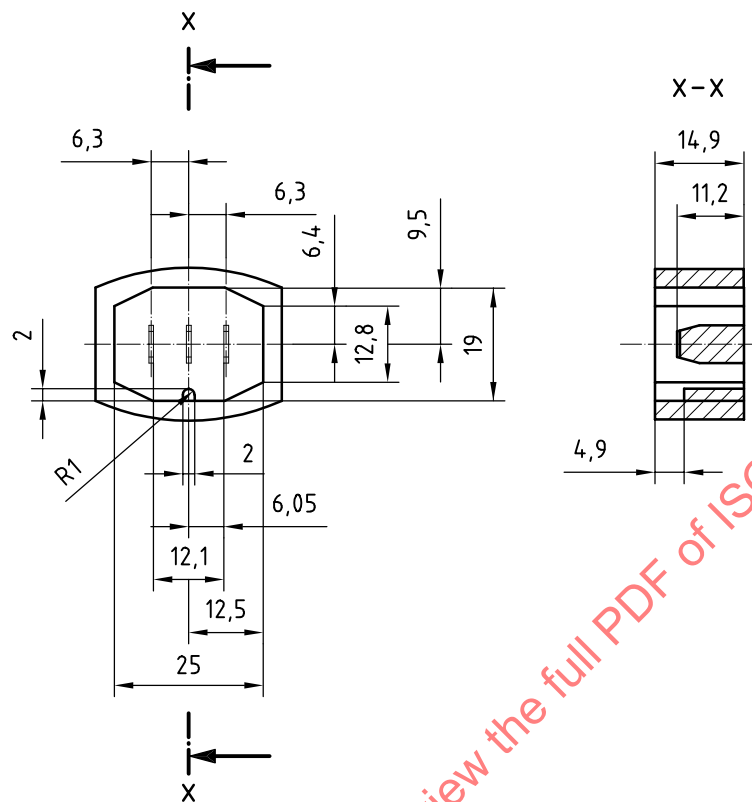


Figure 2 — Socket and pin spacing dimensions

Dimensions in millimetres,  
tolerances in accordance with ISO 2768-m

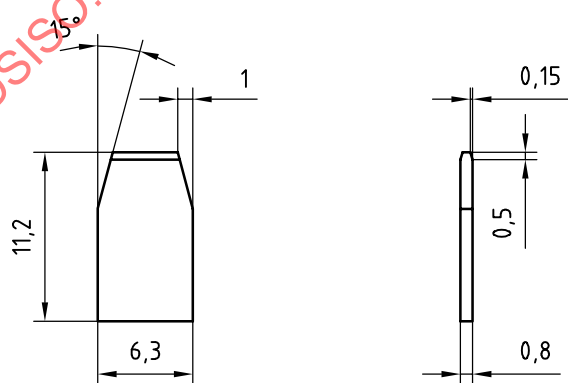


Figure 3 — Male contacts of power strip plug

Dimensions in millimetres,  
tolerances in accordance with ISO 2768-m

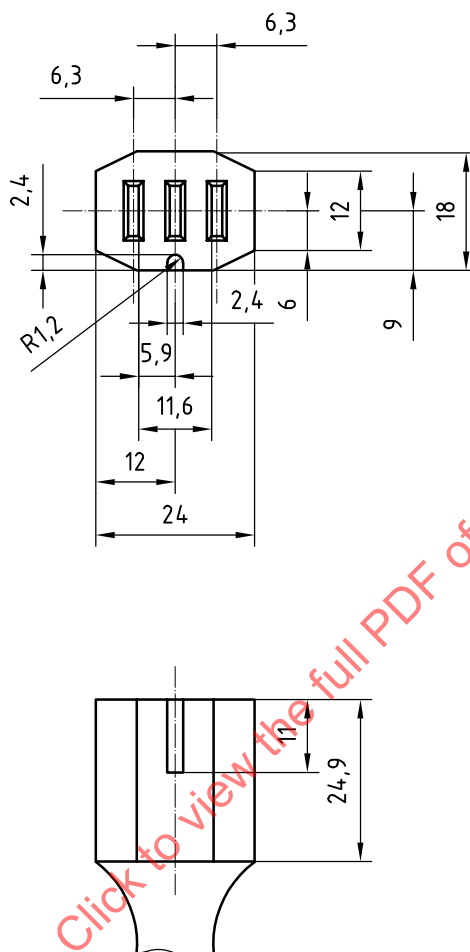


Figure 4 — Power strip plug