

SLOVENSKI STANDARD SIST ISO 5675:2015

01-april-2015

Nadomešča: SIST ISO 5675:1995

Kmetijski traktorji in stroji - Hitro razstavljiva hidravlična spojka za splošni namen

Agricultural tractors and machinery - General purpose quick-action hydraulic couplers

iTeh STANDARD PREVIEW Tracteurs et matériels agricoles - Coupleurs hydrauliques à usage général (standards.iteh.ai)

Ta slovenski standard je istoveten zistisdSO:5675:2008 https://standards.iteh.ai/catalog/standards/sist/0c2742a0-3ebb-4f8f-a1bb-

ICS:

65.060.10 Kmetijski traktorji in prikolice Agricultural tractors and

trailed vehicles

SIST ISO 5675:2015

en,fr



iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST ISO 5675:2015</u> https://standards.iteh.ai/catalog/standards/sist/0c2742a0-3ebb-4f8f-a1bbac238f4613f6/sist-iso-5675-2015



INTERNATIONAL STANDARD

ISO 5675

Third edition 2008-08-01

Agricultural tractors and machinery — General purpose quick-action hydraulic couplers

Tracteurs et matériels agricoles — Coupleurs hydrauliques à usage général

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST ISO 5675:2015</u> https://standards.iteh.ai/catalog/standards/sist/0c2742a0-3ebb-4f8f-a1bbac238f4613f6/sist-iso-5675-2015



Reference number ISO 5675:2008(E)

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.

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST ISO 5675:2015</u> https://standards.iteh.ai/catalog/standards/sist/0c2742a0-3ebb-4f8f-a1bbac238f4613f6/sist-iso-5675-2015



COPYRIGHT PROTECTED DOCUMENT

© ISO 2008

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 Web 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 5675 was prepared by Technical Committee ISO/TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 4, *Tractors*.

This third edition cancels and replaces the second edition (ISO 5675:1992), which has been technically revised. (standards.iteh.ai)

<u>SIST ISO 5675:2015</u> https://standards.iteh.ai/catalog/standards/sist/0c2742a0-3ebb-4f8f-a1bbac238f4613f6/sist-iso-5675-2015



iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST ISO 5675:2015</u> https://standards.iteh.ai/catalog/standards/sist/0c2742a0-3ebb-4f8f-a1bbac238f4613f6/sist-iso-5675-2015

Agricultural tractors and machinery — General purpose quickaction hydraulic couplers

1 Scope

This International Standard specifies the essential interface dimensions, as defined in ISO 7241-1, and the operating requirements for hydraulic couplers employed to transmit hydraulic power from agricultural tractors to agricultural machinery. It is applicable to couplers used in hydraulic lines other than those used for braking circuits (see ISO 5676).

NOTE All hydraulic couplers need to be connected and disconnected frequently to allow the transfer of machinery from one tractor to another without the use of tools or special devices.

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 standards.iteh.ai)

ISO 7241-1:1987, Hydraulic fluid power — Quick-action couplings — Part 1: Dimensions and requirements <u>SIST ISO 5675:2015</u> https://standards.iteh.ai/catalog/standards/sist/0c2742a0-3ebb-4f8f-a1bb-ISO 7241-2:2000, Hydraulic fluid power 38 Quick-action couplings — Part 2: Test methods

3 Terms and definitions

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

3.1coupler female partfemale partpart that has a cavity to receive the male part

3.2coupler male partmale partprobe that fits and locks into the cavity of the female part

4 Requirements

4.1 Dimensional requirements

The dimensions of the coupler male part shall be in accordance with ISO 7241-1:1987, Table 1 and Figure 1, series "A", for sizes 12,5 and 20. In addition, the coupler male part dimension shall be in accordance with Figure 1 and Table 1 of this International Standard, in order to be compatible with dust protection devices.

ISO 5675:2008(E)

Any female part shall couple with any male part when both conform to this International Standard.



For dimension P, see Table 1.

^a Dimension in accordance with ISO 7241-1, series "A".



iTeh Stable 1 Dimension PREVIEW

(standards.iteh.ai	Dimensions in millimetres
Nominal size	Dimension
(according to ISO 7241-1) SIST ISO 5675:2015	P
https://stagsirds.iteh.ai/catalog/standards/sist/0c2742a0	-3ebb-4f8f-a1bb- ≤ 31
20 ac238f4613f6/sist-iso-5675-2015	≼ 38
NOTE 1 The size designation corresponds to the nominal inside diameter of the hose	recommended for use with the coupling, as

NOTE 1 The size designation corresponds to the nominal inside diameter of the hose recommended for use with the coupling, as specified in ISO 4397.

NOTE 2 Similar couplers are described in ISO 7241-1; however, couplers conforming to ISO 7241-1 might not conform to this International Standard.

4.2 Operating requirements

4.2.1 The coupler shall be in accordance with the operating requirements of ISO 7241-1, series "A".

4.2.2 The pressure drop through the coupler shall not be greater than 0,35 MPa (3,5 bar) with a flow of 45 l/min for size 12,5 and 70 l/min for size 20. The pressure drop shall be measured in accordance with ISO 7241-2.

The requirements of this International Standard mean that two coupler parts, one having a conical and the other a ball valve, may be coupled together. Care should then be taken to ensure that these requirements are fulfilled.

4.2.3 It shall be possible to connect the coupler by hand with a pressure of 16 MPa (160 bar) in the male part. The connecting force shall not exceed 200 N with a pressure, in the female part, of 0,25 MPa (2,5 bar) for size 12,5 and of 0,100 MPa (1 bar) for size 20.

4.2.4 The disconnecting force shall not exceed 1,7 kN for size 12,5 and 2,5 kN for size 20 when subjected to an internal pressure of 17,5 MPa (175 bar) in the male part. The disconnecting force shall be measured in accordance with ISO 7241-2.

4.2.5 The spillage at an internal pressure of 0,1 MPa (1 bar) shall be in accordance with Table 2. A spillage test shall be conducted in accordance with ISO 7241-2.

4.2.6 The spillage when disconnecting with an internal pressure of 17,5 MPa (175 bar) shall be in accordance with Table 2.

Nominal size	Spillage when disconnecting at	
(according to ISO 7241-1)	0,1 MPa	17,5 MPa
12,5	2,5 ml	4,0 ml
20	9,0 ml	12,5 ml

Table 2 — Spillage on disconnect with pressure

4.2.7 The force required to fully open the valve in the male part, when there is no internal pressure in the male part, shall not exceed 45 N for size 12,5 and 70 N for size 20.

4.2.8 The coupling shall not check-off (closure of the valve) when flowing oil in the male-to-female direction at flow rates less than 190 l/min for size 12,5 and less than 250 l/min for size 20. Fluid viscosity for this requirement shall be in accordance with ISO 7241-2:2000, 5.2.

5 Location on tractor

5.1 Rear-mounted and side coupler

The female part of the coupler shall be mounted within the area described in Figure 2.



Key

- 1 tractor drawbar, located per nominal dimensions given in ISO 6489-3
- 2 area of location of rear-mounted couplers
- 3 area of location of side-mounted couplers

Figure 2 — Location of rear-mounted and side coupler