SLOVENSKI STANDARD
oSIST prEN ISO 8205:2020

01-julij-2020

Oprema za uporovno varjenje - Vodno hlajeni sekundarni priključni kabli - Mere in zahteve za dvožilne priključne kable (ISO/DIS 8205:2020)

Resistance welding equipment - Water-cooled secondary connection cables - Dimensions and requirements for double-conductor connection cables (ISO/DIS 8205:2020)

Widerstandsschweißeinrichtungen - Wassergekühlte Sekundäranschlusskabel - Abmessungen und Anforderungen für Zweileiter-Anschlusskabel (ISO/DIS 8205:2020)

Équipement de soudage par résistance - Câbles secondaires refroidis par eau - Dimensions et exigences pour câbles à deux conducteurs (ISO/DIS 8205:2020)

Ta slovenski standard je istoveten z: **prEN ISO 8205**

ICS:

25.160.30	Varilna oprema	Welding equipment

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Resistance welding equipment — Water-cooled secondary connection cables —

Part :
Dimensions and requirements for double-conductor connection cables

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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 6, *Resistance welding and allied mechanical joining*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Official interpretations of TC 44 documents, where they exist, are available from this page: https://committee.iso.org/sites/tc44/home/interpretation.html.

This third edition cancels and replaces the second editions (ISO 8205-1:2002, ISO 8205-2:2002 and ISO 8205-3:2012), which has been technically revised.

The main changes compared to the previous edition are as follows:

— All 3 parts of ISO 8205 are now contained in one document

— rest to be completed closer to publication after DIS ballot

Resistance welding equipment — Water-cooled secondary connection cables —

Part :
Dimensions and requirements for double-conductor connection cables

1 Scope

This document gives specifications to single- and double-conductor secondary connection cables used for resistance welding and allied processes. It stipulates the requirements regarding the electrical, mechanical and cooling characteristics of these cables and their conditions of use.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
double-conductor connection cable
cable comprising two conductors providing an electrical link between the secondary terminals of a welding transformer and the welding set (manual or robotized guns) and designed so as to have as low an electrical reactance as possible

3.2
single-conductor connection cable
cable comprising one conductor providing an electrical link between the secondary terminals of a welding transformer and the welding set (manual or robotized guns)

4 Classification

4.1 Form of the end lugs

Double-conductor water-cooled connection cables are classified into two types, ~~A, B, C~~ A-1 and ~~D~~ A-2, according to the form of the end lugs (see 5.1.3).

Single-conductor water-cooled connection cables are classified into ~~two~~ three types, ~~E, F~~ C-1,C-2 and ~~G~~ D, according to the form of the end lugs (see 5.2.3).

4.2 Resistance and reactance

Double-conductor, water cooled connection cables are classified into two types, A-1 and A-2~~, B, C and D~~, with power factor cosφ ≥ 0,95 as shown in Figures 1 a and 1b respectively.

5 Dimensions

5.1 Double conductor connection cables

5.1.1 Cross-sectional area

The effective cross-sectional area of copper per conductor shall be one of the following:

100 mm^2

150 mm^2

160 mm^2

200 mm^2

250 mm^2

315 mm^2

5.1.2 Length

The length, *L*, of the cable shall be one of the following (non-preferred values are given in parentheses).

The length shall have a tolerance $\frac{+1}{0}$ %:

1 000 mm

1 200 mm

1 250 mm – (1 500 mm)

1 600 mm – (1 800 mm)

2 000 mm – (2 240 mm)

2 400 mm

2 500 mm – (2 800mm)

3 000 mm

3 150 mm

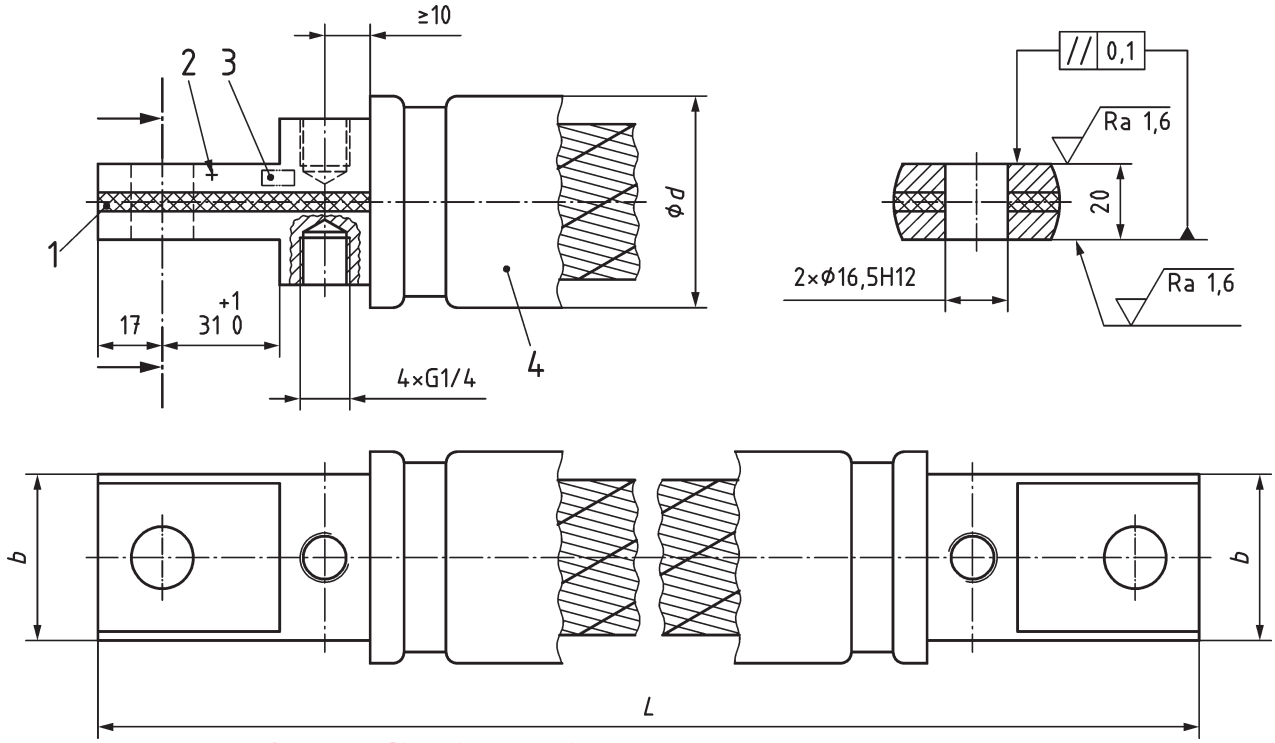
3 500 mm – (3 550mm)

4 000 mm

5.1.3 End lugs

The end lugs shall have the dimensions given in Figure 1 and Table ~~2~~ 1.

Dimensions in millimetres



a) Type ~~A and B~~ A-1