INTERNATIONAL STANDARD

ISO 9312

Second edition
2013-07-15

Resistance welding equipment — Insulated pins for use in electrode back-ups

Équipement de soudage par résistance — Fiches isolées utilisées dans les contre-électrodes

Reference number
ISO 9312:2013(E)

COPYRIGHT PROTECTED DOCUMENT

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

Contents

Page

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.

ISO 9312 was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 6, *Resistance welding and allied mechanical joining*.

This second edition cancels and replaces the first edition (ISO 9312:1990), of which it constitutes a minor revision.

Resistance welding equipment — Insulated pins for use in electrode back-ups

1 Scope

This International Standard specifies the requirements for insulated pins used to pin parts in the secondary circuit of resistance welding equipment, or other live equipment, which need to be insulated from each other.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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*

ISO 5827, *Spot welding — Electrode back-ups and clamps*

IEC 60893-3-4, *Insulating materials — Industrial rigid laminated sheets based on thermosetting resins for electrical purposes — Part 3-4: Specifications for individual materials — Requirements for rigid laminated sheets based on phenolic resins*

3 Dimensions

The dimensions of the insulated pins shall be in accordance with Figure 1 and Table 1.

Details left unspecified shall be designed as appropriate.

4 Designation

Insulated pins that comply with this International Standard shall be designated as follows (in the order given):

a) description block (i.e. “insulated pin”);

b) reference to this International Standard;

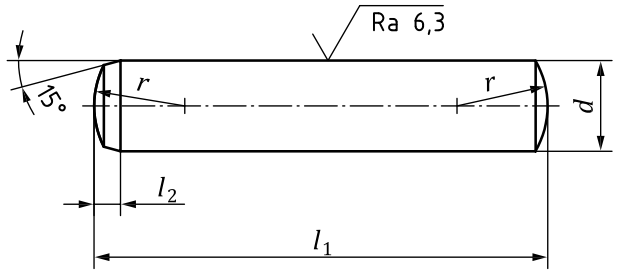
c) pin diameter, d, in millimetres.

EXAMPLE An insulated pin with a diameter d = 8 mm is designated as follows:

Insulated pin ISO 9312:—, 8

5 Material

The material shall be hard fabric, coarse weave according to IEC 60893-3-4 — PF CC 201 or IEC 60893-3-4 — PF CC 202.



NOTE See ISO 1302 for indication of surface texture.

Figure 1 — Insulated pin dimensions

Table 1 — Insulated pin dimensions

Dimensions in millimetres

d	l_1	l_2	r
6	30	2	6
8	40	2,5	8
10	50	3	10
12	60	3,5	12

6 Finish

Permissible deviations for dimensions without tolerance indications shall be “medium” in accordance with ISO 2768-1 (designation: ISO 2768-m).

7 Application

A typical application of insulated pins complying with this International Standard is given in ISO 5827.

Bibliography

[1] ISO 1302, *Geometrical Product Specifications (GPS) — Indication of surface texture in technical product documentation*

ICS 25.160.30

Price based on 3 pages