

INTERNATIONAL STANDARD

**ISO
9654**

Second edition
2004-09-15

Pliers and nippers for electronics — Single-purpose nippers — Cutting nippers

Pinces pour l'électronique — Pinces unifonction — Pinces coupantes

Preview

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Foreword

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ISO 9654 was prepared by Technical Committee ISO/TC 29, *Small tools*, Subcommittee SC 10, *Assembly tools for screws and nuts, pliers and nippers*.

This second edition cancels and replaces the first edition (ISO 9654:1989) which has been technically revised.

Pliers and nippers for electronics — Single-purpose nippers — Cutting nippers

1 Scope

This International Standard specifies the principal dimensions of single-purpose cutting nippers for electronics and the range of diameters of test wires to be used to verify the functional performance of these nippers in accordance with ISO 9656. The general technical requirements are given in ISO 9657.

The cutting nippers illustrated in this International Standard are only examples and are not intended to affect the manufacturer's design.

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 9656, *Pliers and nippers for electronics — Test methods*

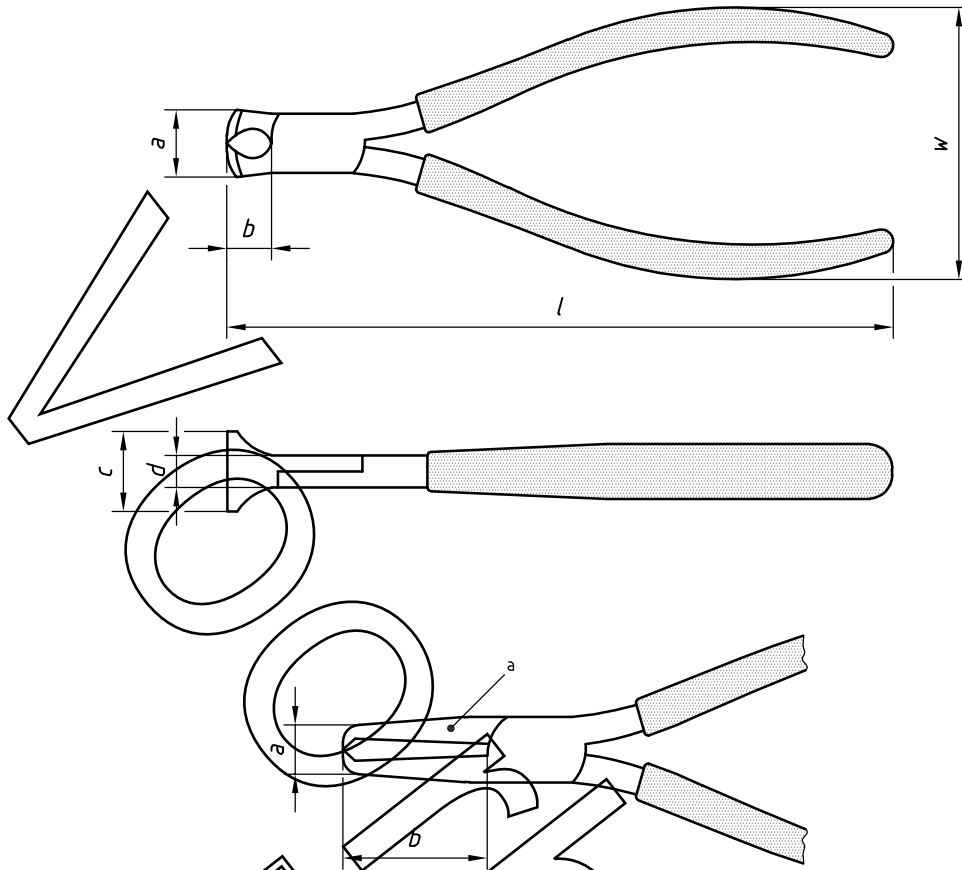
ISO 9657, *Pliers and nippers for electronics — General technical requirements*

IEC 60317-0-1, *Specifications for particular types of winding wires — Part 0-1: General requirements — Enamelled round copper wire*

3 Dimensions

3.1 End cutting nippers

The principal dimensions of end cutting nippers are shown in Figure 1 and given in Table 1. The range of test wire diameters to be used is given in Table 2.



a Long jaws.

Figure 1 — End cutting nippers

Table 1 — End cutting nippers, principal dimensions

Dimensions in millimetres

Length of jaws	l	a max.	b	Dimensions in millimetres		w ± 5
				ϵ max.	d max.	
Short jaws	112 ± 7	13	9 max.	22	9	48
Long jaws	125 ± 8	7	14 min.	8	9	50
	160 ± 10	7	36 min.	10	10	50

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