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Pliers and nippers — Multiple slip joint pliers — Dimensions and test values

Pinces et tenailles — Pinces multiprises — Dimensions et valeurs d'essai

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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 29, *Small tools*, Subcommittee SC 10, *Assembly tools for screws and nuts, pliers and nippers*.

This third edition cancels and replaces the second edition (ISO 8976:2004), which has been technically revised.

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

— introduced minimum and maximum lengths for each nominal length.

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.

Pliers and nippers — Multiple slip joint pliers — Dimensions and test values

1 Scope

This document specifies the principal dimensions of multiple slip joint pliers.

It also specifies test values for the pliers to verify their aptitude to function in conformity with ISO 5744. General technical requirements are given in ISO 5743.

The multiple slip joint pliers illustrated in this document are only examples and are not intended to affect the manufacturer's design.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 5742, *Pliers and nippers — Nomenclature*

ISO 5743, *Pliers and nippers— General technical requirements*

ISO 5744:2004, *Pliers and nippers — Methods of test*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5742 apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

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

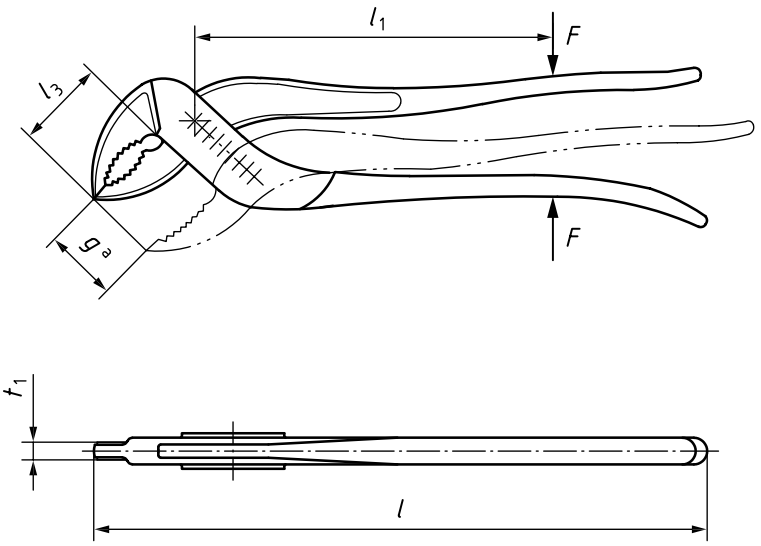
— IEC Electropedia: available at https://www.electropedia.org/

4 Dimensions and test values

The principal dimensions of multiple slip joint pliers are shown in Figure 1 and given in Table 1.

The different joint types are shown in ISO 5742.

After the load test, the permanent set, s, shall not exceed the value given in Table 1. If distance l_1 is not suitable for the load test, the formula given in ISO 5744:2004, 4.2 shall be used.



Key

F load applied in the load test

[a] Jaws parallel.

Figure 1 — Multiple slip joint pliers

Table 1 — Multiple slip joint pliers, principal dimensions and load test values

l	l_{min}	l_{max}	t_1	g	l_3	l_1	Load test	
							Load	Maximum permanent set
			maximum	minimum	minimum		F [a]	s [b] maximum
	mm	mm	mm	mm	mm	mm	N	mm
100	90	112	5	12	7,5	71	400	1
125	113	142	7	12	10	80	500	1,2
160	143	179	10	16	18	100	630	1,4
200	180	224	11	22	20	125	800	1,8
250	225	284	12	28	25	160	1 000	2,2
315	285	359	13	35	35	200	1 250	2,8
400	360	449	15	80	50	250	1 400	3,6
500	450	564	16	125	70	315	1 400	4

[a] When carried out in accordance with the torsion test for flat nose pliers given in ISO 5744.

[b] $s = w_1 - w_2$ (see ISO 5744).

5 Designation

EXAMPLE

Multiple slip joint pliers with a lay on joint, number 207A in accordance with ISO 5742, with a nominal length l = 250 are designated as follows:

Multiple slip joint pliers 207 A - ISO 8976 - 250