INTERNATIONAL STANDARD

ISO 8976

Second edition
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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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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

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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.

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 8976 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 8976:1988) which has been technically revised.

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

1 Scope

This International Standard 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 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 5743, *Pliers and nippers— General technical requirements*

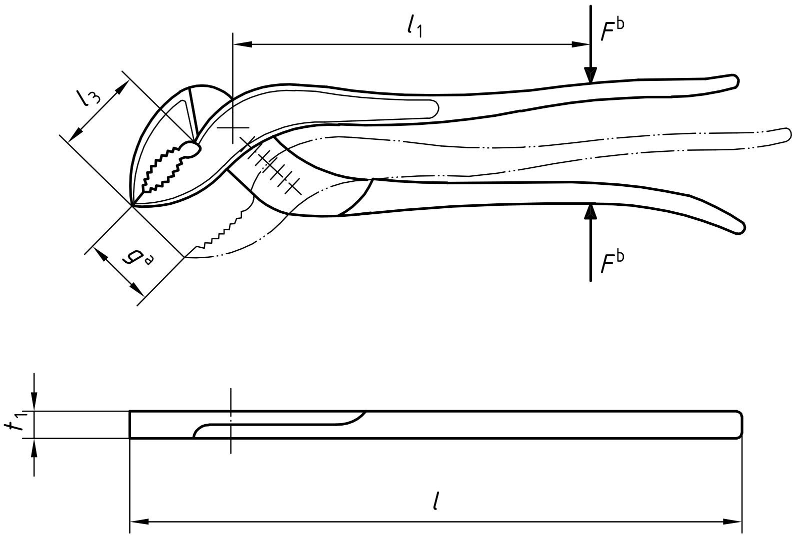
ISO 5744:2004, *Pliers and nippers— Methods of test*

3 Dimensions and test values

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

The different types of multiple slip joint pliers are shown in Figures 2 to 5.

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.



[a] Jaws parallel.

[b] F = load applied in the load test.

Figure 1 — Multiple slip joint pliers

Figure 2 — Multiple slip joint pliers, 207 A with a lay on joint

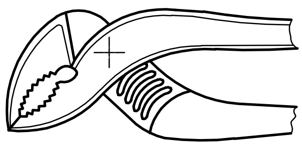


Figure 3 — Multiple slip joint pliers, 207 B with a tongue and groove

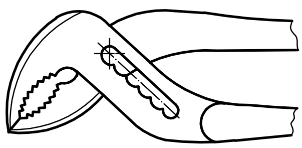


Figure 4 — Multiple slip joint pliers, 207 C with a box joint

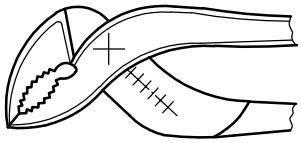


Figure 5 — Multiple slip joint pliers, 207 D with any other type of joint

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

l mm	t_1 max. mm	g min. mm	l_3 min. mm	l_1 mm	Load test	
					Load F[a] N	Maximum permanent set s[b] max. mm
100 ± 10	5	12	7,5	71	400	1
125 ± 15	7	12	10	80	500	1,2
160 ± 15	10	16	18	100	630	1,4
200 ± 15	11	22	20	125	800	1,8
250 ± 15	12	28	25	160	1 000	2,2
315 ± 20	13	35	35	200	1 250	2,8
400 ± 30	15	80	50	250	1 400	3,6
500 ± 30	16	125	70	315	1 400	4

[a] The load F shall be measured in according with ISO 5744.

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

4 Designation

EXAMPLE

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

Multiple slip joint pliers 207 A - ISO 8976 - 250

5 Marking

Marking shall be in accordance with ISO 5743.

Bibliography

[1] ISO 5742, *Pliers and nippers — Nomenclature*