

# INTERNATIONAL STANDARD

# ISO 9343

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## Pliers and nippers — Slip joint pliers — Dimensions and test values

*Pincés et tenailles — Pincés réglables à deux positions — Dimensions  
et valeurs d'essai*



Reference number  
ISO 9343:2004(E)

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## Foreword

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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 9343 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 9343:1988) which has been technically revised.



# Pliers and nippers — Slip joint pliers — Dimensions and test values

## 1 Scope

This International Standard specifies the principal dimensions of slip joint pliers, designated as No. 206 in ISO 5742, and the test values, in order to verify their aptitude to function in conformity with ISO 5744. The general technical requirements are given in ISO 5743.

The slip joint pliers illustrated in this International Standard are examples only 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*

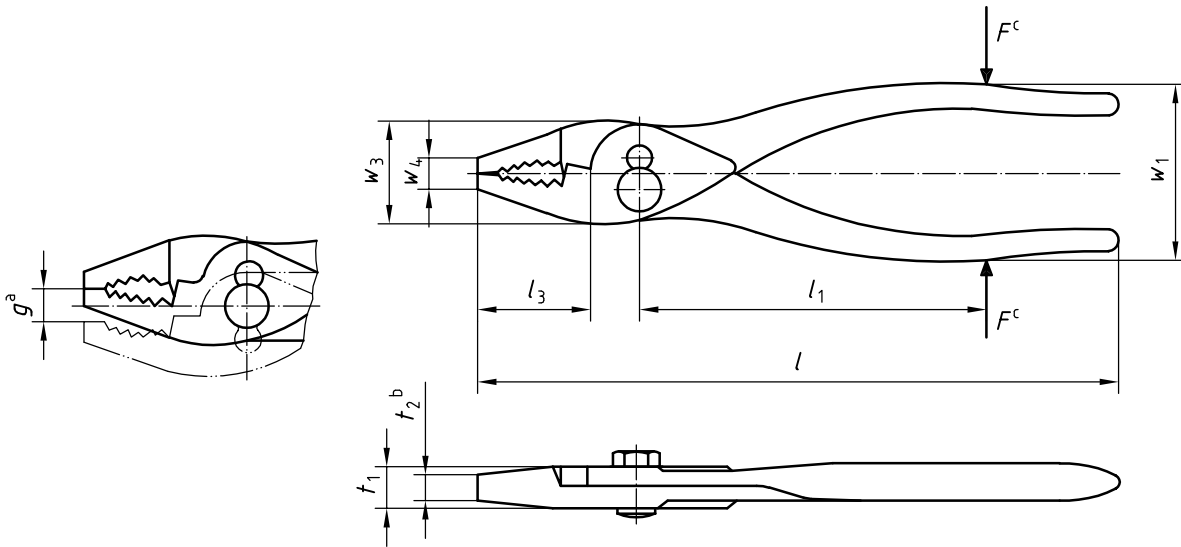
ISO 5744:2004, *Pliers and nippers — Methods of test*

## 3 Dimensions and test value

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

For the pliers provided with a comfort grip, the opening of the handle must be defined with this.

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  $t_2 \leq t_1$ .
- c  $F$  = load applied in load test.

Figure 1 — Slip joint pliers

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

$l$	$w_1$	$w_3$	$w_4$	$t_1$	$l_1$	$l_3$	$g$	Load test	
								Load $F$	Maximum permanent set $s^a$
mm	mm +15 -5	max. mm	max. mm	max. mm	mm	$\pm 5$ mm	min. mm	N	max. mm
$160 \pm 8$	48	32	8	10	80	30	7	1 000	1
$180 \pm 9$	49	35	10	11	90	35	8	1 120	1
$200 \pm 10$	50	40	12,5	12,5	100	35	9	1 250	1
$250 \pm 10$	50	45	12,5	12,5	125	40	10	1 400	1,5

<sup>a</sup>  $s = w_1 - w_2$  (see ISO 5744).

## 4 Designation

### EXAMPLE

Slip joint pliers, number 206 in accordance with ISO 5742, with a nominal length  $l = 180$  mm are designated as follows:

**Slip joint pliers 206 - ISO 9343 - 180**

## 5 Marking

Marking shall be in accordance with ISO 5743.

## Bibliography

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

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