# INTERNATIONAL STANDARD

ISO 2380-2

Third edition 2004-12-15

## Assembly tools for screws and nuts — Screwdrivers for slotted-head screws —

### Part 2:

General requirements, lengths of blades and marking of hand-operated screwdrivers

Outils de manœuvre pour vis et écrous — Tournevis pour vis à tête fendue —

Partie 2: Spécifications générales, longueurs des lames et marquage des tournevis à main



Reference number ISO 2380-2:2004(E)

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Published in Switzerland

### **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 2380-2 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 2380-2:2000), which has been technically revised.

ISO 2380 consists of the following parts, under the general title Assembly tools for screws and nuts — Screwdrivers for slotted-head screws:

- Part 1: Tips for hand- and machine-operated screwdrivers
- Part 2: General requirements, lengths of blades and marking of hand-operated screwdrivers

### Assembly tools for screws and nuts — Screwdrivers for slotted-head screws —

### Part 2:

### General requirements, lengths of blades and marking of hand-operated screwdrivers

### 1 Scope

This part of ISO 2380 specifies the general requirements, lengths of blades and the marking of hand-operated screwdrivers for slotted-head screws as specified in ISO 4759-1.

The blade tips are specified in ISO 2380-1.

### 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 272, Fasteners — Hexagon products — Widths across flats

ISO 2380-1, Assembly tools for screws and nuts — Screwdrivers for slotted-head screws — Part 1: Tips for hand- and machine-operated screwdrivers

ISO 4759-1, Tolerances for fasteners — Part 1: Bolts, screws, studs and nuts — Product grades A, B and C

### 3 General requirements

The material, shape and finish of the handle shall be suitable for the normal conditions of use.

The handle and the blade shall not be rough or have faults which could cause accidents during use of the screwdriver.

The torque requirements shall be in accordance with ISO 2380-1.

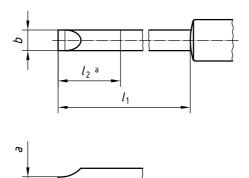
### 4 Blade lengths

The blade lengths,  $l_1$  (see Figure 1), shall be in accordance with Table 1, in relation to the tip dimensions of the screwdrivers. Four series of lengths are provided.

For tips of nominal dimensions 1 mm  $\times$  5,5 mm and greater, the screwdriver may have a hexagonal drive near the handle, as shown in Figure 2, of which the width across the flats, s, and the respective tolerances shall be in accordance with ISO 272 and ISO 4759-1. The dimension  $h_{\min}$  is determined using the formula:

$$h_{\min} = 0.5 \, s$$

NOTE Figures 1 and 2 are given as examples and are not intended to influence the manufacturer's design.



 $l_2$  is valid for form B only, and is the length of the tool shaft with diameter b according to ISO 2380-1.  $l_2$  = (3 × b) min.

Figure 1

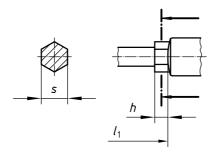


Figure 2

Table 1 — Screwdriver blades for slotted-head screws

Dimensions in millimetres

Dimensions of tip in accordance with ISO 2380-1		l <sub>1</sub> +5 0 Series			
а	b	Α	В	С	D
0,4	2		40		
	2,5		50	75	100
0,5	3		50	75	100
0,6	3		75	100	125
	3,5	25 (35)	75	100	125
0,8	4	25 (35)	75	100	125
1	4,5	25 (35)	100	125	150
	5,5	25 (35)	100	125	150
1,2	6,5	25 (35)	100	125	150
	8	25 (35)	125	150	175
1,6	8		125	150	175
	10		150	175	200
2	12		150	200	250
2,5	14		200	250	300
NOTE Dimensions between parentheses are non-preferred.					

### 5 Marking

The marking of dimensions a and b and the trademark shall be legible and indelible under normal conditions of use. Indication of the blade length is optional, but when given it shall be the nominal dimension specified in Table 1.

### 6 Designation

A screwdriver conforming to this part of ISO 2380 shall be designated as follows:

- a) "Screwdriver";
- b) reference to this part of ISO 2380, i.e. "ISO 2380-2";
- c) series of screwdriver (A, B, C or D);
- d) screwdriver tip in accordance with ISO 2380-1;
- e) capital letter H in the case of a hexagonal drive near the handle.

EXAMPLE 1 A screwdriver series A, with tip dimensions 1,2 mm  $\times$  8 mm and no hexagonal drive is designated as follows:

Screwdriver ISO 2380-2 A 1,2 × 8

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EXAMPLE 2 A screwdriver series A, with tip dimensions 1,2 mm  $\times$  8 mm and a hexagonal drive is designated as follows:

Screwdriver ISO 2380-2 A 1,2 × 8 H

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ICS 25.140.01

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