
**Assembly tools for screws and nuts —
Machine-operated screwdriver bits —
Part 1:
Screwdriver bits for slotted head screws**

*Outils de manœuvre pour vis et écrous — Embouts tournevis à
machine —*

Partie 1: Embouts tournevis pour vis à tête fendue



Reference number
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Foreword

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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 2351-1 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 2351-1:2002), which has been technically revised.

ISO 2351 consists of the following parts, under the general title *Assembly tools for screws and nuts — Machine-operated screwdriver bits*:

- *Part 1: Screwdriver bits for slotted head screws*
- *Part 2: Screwdriver bits for cross-recessed head screws*
- *Part 3: Screwdriver bits for hexagon socket screws*

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Assembly tools for screws and nuts — Machine-operated screwdriver bits —

Part 1: Screwdriver bits for slotted head screws

1 Scope

This part of ISO 2351 prescribes the technical specifications for machine-operated screwdriver bits for slotted head screws. It applies to bits with male hexagon drive or with cylindrical flat end drive as defined in ISO 1173, and to tips for screwdrivers Type C as defined in ISO 2380-1.

It also gives recommended combinations between tips and bits.

NOTE Machine-operated screwdriver bits are listed under number 3 2 04 01 0 in ISO 1703.

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.

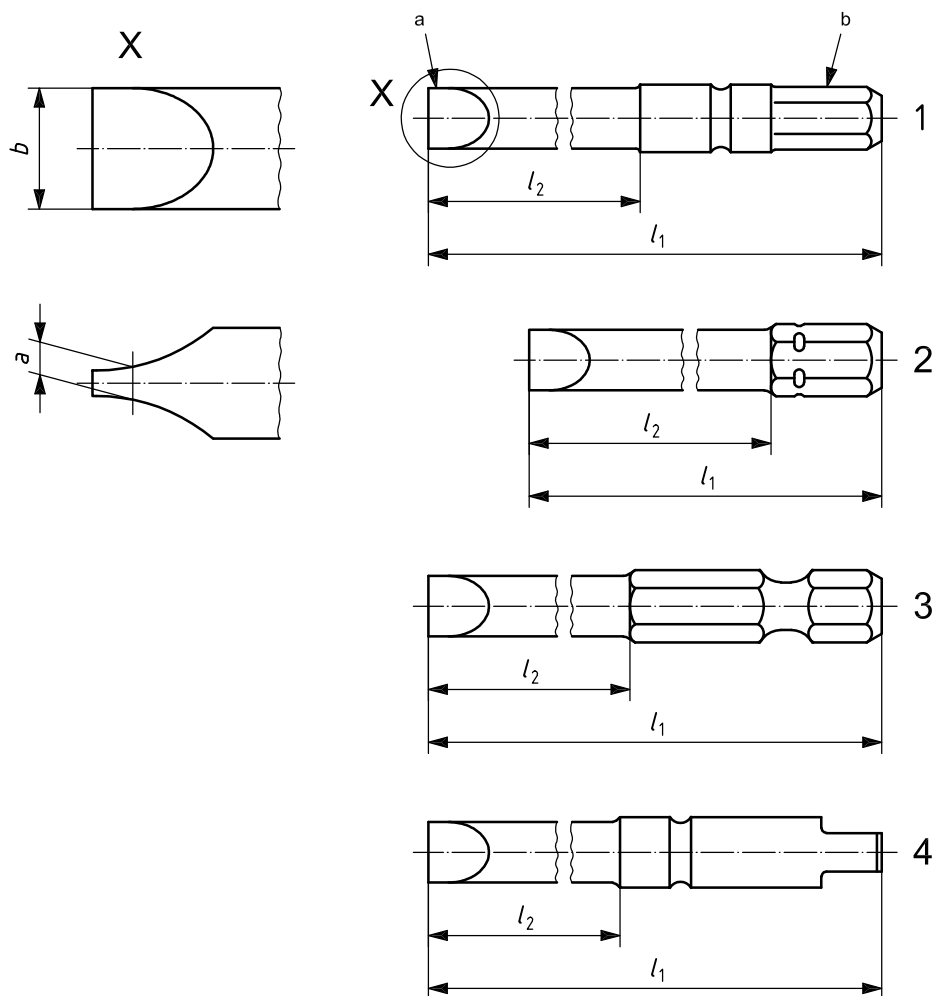
ISO 1173, *Assembly tools for screws and nuts — Drive ends for hand- and machine-operated screwdriver bits and connecting parts — Dimensions, torque testing*

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

3 Dimensions

Figure 1 and Table 1 show the recommended combinations of screwdriver bits for slotted head screws.

The shape of the liaison between the tip and the driver end is at the discretion of the manufacturer.



Key

- 1 Form A
- 2 Form C
- 3 Form E
- 4 Form G

^a Part in contact with the screw (in accordance with ISO 2380-1, Type C).

^b Driver end (in accordance with ISO 1173).

Figure 1 — Screwdriver bits (see Table 1)

Table 1 — Recommended combinations between tip and driver end

Dimensions in millimetres

Nominal dimensions of tips (in accordance with ISO 2380-1, Type C)		Male hexagon or cylindrical flat end of form (in accordance with ISO 1173)										
		A 3	A 5,5	C 4	C 6,3	C 8	C 12,5	E 6,3	E 8	E 11,2	G 7	
Thickness <i>a</i>	Width <i>b</i>	<i>l</i> ₁ max.	51		29	40	42	51	51	86		54
		<i>l</i> ₂ min.	25		11	13	14	14	24	52	47	25
0,4	2		X		X							
	2,5		X		X	X						
0,5	3		X	X	X	X			X			X
	4		X	X	X	X			X			X
0,6	3		X	X	X	X			X			X
	3,5		X	X	X	X			X			X
	4,5		X	X	X	X			X			X
0,8	4		X	X	X	X			X		X	X
	5,5		X	X	X	X	X		X	X	X	X
1	4,5		X	X	X	X	X		X	X	X	X
	5,5		X	X	X	X	X		X	X	X	X
	6			X		X	X		X	X	X	X
1,2	6,5			X		X	X		X	X	X	X
	8			X		X	X		X	X	X	X
1,6	8			X		X	X	X	X	X	X	X
	10			X		X	X	X	X	X	X	
2	12						X	X		X	X	
2,5	14						X	X		X	X	

4 Technical requirements

The technical specifications of bits are the same as those for screwdrivers in accordance with ISO 2380-1, Type C.

5 Torque test

Torque testing shall be carried out in accordance with ISO 2380-1, Type C.

6 Designation

A screwdriver bit in accordance with this part of ISO 2351 shall be designated by:

- a) "Bit";
- b) the reference to this part of ISO 2351 (i.e. ISO 2351-1);
- c) the form and the dimensions of the driver end (in accordance with ISO 1173);
- d) the dimensions of the tip (in accordance with ISO 2380-1, Type C).

EXAMPLE A screwdriver bit for slotted head screws with a drive end E 11,2 (in accordance with ISO 1173) and the tip dimensions 1,6 mm × 8 mm (in accordance with ISO 2380-1, Type C) is designated as follows

Bit ISO 2351-1 E 11,2 – 1,6 × 8

7 Marking

Screwdriver bits in accordance with this part of ISO 2351 shall be marked permanently and legibly with:

- a) the name of the manufacturer or supplier;
- b) dimensions of the tip, $a \times b$.

For male hexagons A 3 and C 4, the marking shall be given only on the smallest commonly used packaging unit.

Bibliography

- [1] ISO 1703, *Assembly tools for screws and nuts — Designation and nomenclature*
- [2] ISO 2351-2, *Assembly tools for screws and nuts — Machine-operated screwdriver bits Part 2: Screwdriver bits for cross-recessed head screw*
- [3] ISO 2351-3, *Assembly tools for screws and nuts — Machine-operated screwdriver bits — Part 3: Screwdriver bits for hexagon socket screws*

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