

# Tapping screw thread

The European Standard EN ISO 1478:1999 has the status of a  
British Standard

ICS 21.040.30

## National foreword

This British Standard is the English language version of EN ISO 1478:1999. It is identical with ISO 1478:1999. It supersedes BS EN ISO 1478:1995 which is withdrawn.

The UK participation in its preparation was entrusted by Technical Committee FME/9, Bolts, nuts and accessories, to Subcommittee FME/9/2, Slotted and recessed head screws, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

A list of organizations represented on this Subcommittee can be obtained on request to its secretary.

### Cross-references

Attention is drawn to the fact that CEN and CENELEC Standards normally include an annex which lists normative references to international publications with their corresponding European publications. The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

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### Summary of pages

This document comprises a front cover, an inside front cover, the EN ISO title page, the EN ISO forward page, the ISO title page, page ii, pages 1 to 3 and a back cover.

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### Amendments issued since publication

Amd. No.	Date	Comments

This British Standard, having been prepared under the direction of the Engineering Sector Committee, was published under the authority of the Standards Committee and comes into effect on 15 January 2000

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English version

## Tapping screw thread (ISO 1478:1999)

Filetage de vis à tôle (ISO 1478:1999)

Blechsraubengewinde (ISO 1478:1999)

This European Standard was approved by CEN on 16 July 1999.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

## Foreword

The text of the International Standard ISO 1478:1999 has been prepared by Technical Committee ISO/TC 2 "Fasteners" in collaboration with Technical Committee CEN/TC 185 "Threaded and non-threaded mechanical fasteners and accessories", the secretariat of which is held by DIN.

This European Standard supersedes EN ISO 1478:1994.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2000, and conflicting national standards shall be withdrawn at the latest by February 2000.

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**NOTE FROM CEN/CS:** The foreword is susceptible to be amended on reception of the German language version. The confirmed or amended foreword, and when appropriate, the normative annex ZA for the references to international publications with their relevant European publications will be circulated with the German version.

## Endorsement notice

The text of the International Standard ISO 1478:1999 was approved by CEN as a European Standard without any modification.

# INTERNATIONAL STANDARD

EN ISO 1478:1999

**ISO**  
**1478**

Second edition  
1999-08-01

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## Tapping screws thread

*Filetage de vis à tôle*



Reference number  
ISO 1478:1999(E)

## Foreword

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International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

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.

International Standard ISO 1478 was prepared by Technical Committee ISO/TC 2, *Fasteners*.

This second edition cancels and replaces the first edition (ISO 1478:1983) which has been technically revised.

# Tapping screws thread

## 1 Scope

This International Standard specifies the thread and thread ends for tapping screws (sheet metal screws) with thread sizes from ST1,5 to ST9,5 inclusive.

## 2 Dimensions

See Figures 1 and 2 and Table 1.

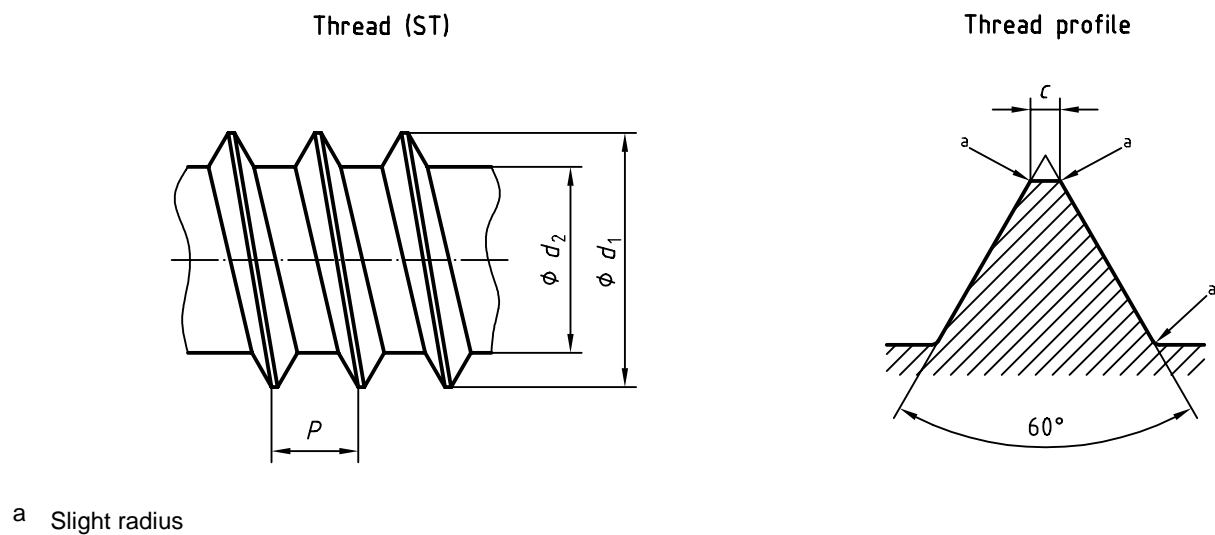
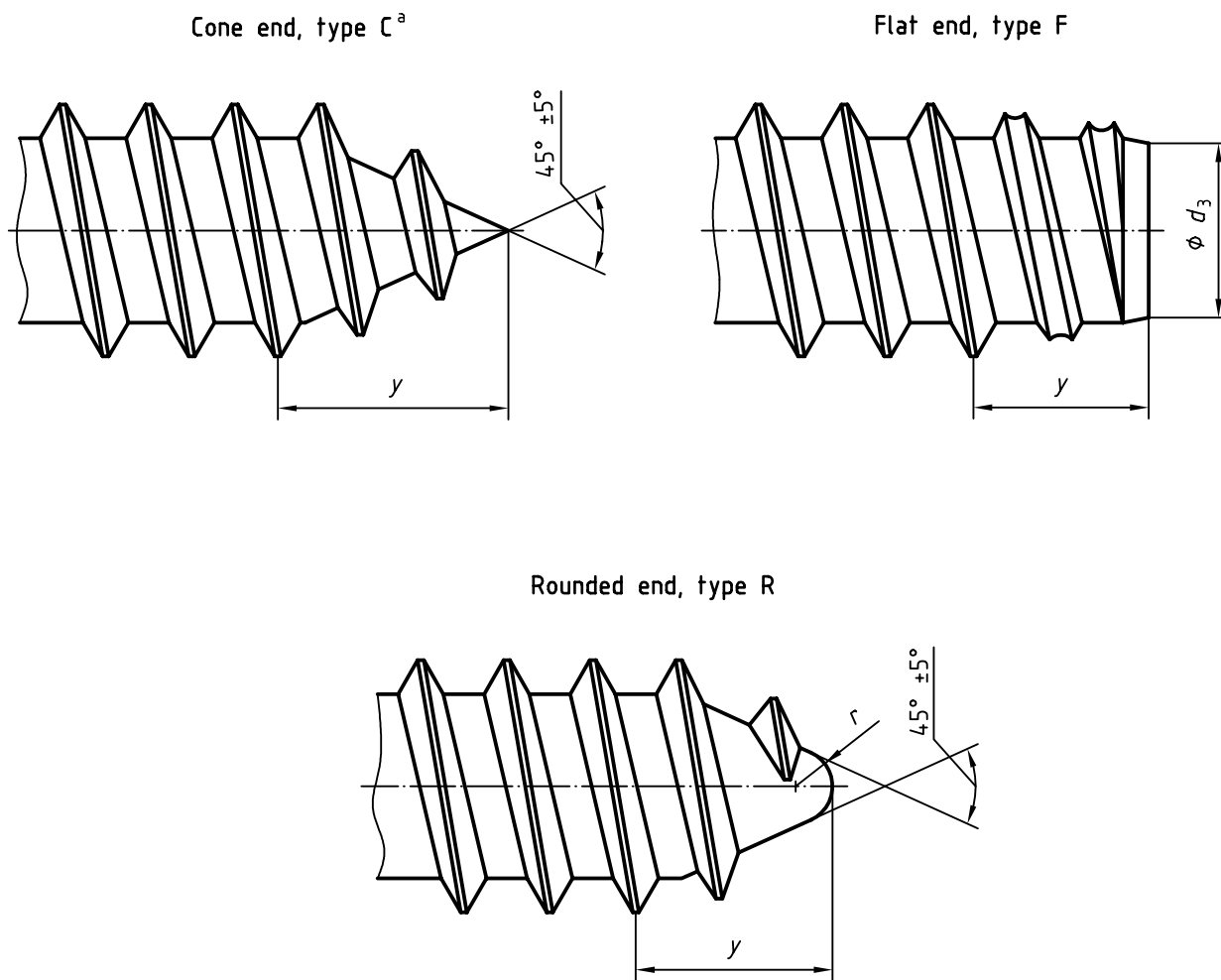


Figure 1 — Thread dimensions



- <sup>a</sup> No extrusion of excess metal beyond the apex of the type C cone end resulting from thread rolling shall be permissible. A slight rounding or truncation of the point is desirable.

**Figure 2 — Thread ends**



Table 1 — Dimensions

Dimensions in millimetres

Thread size		ST 1,5	ST 1,9	ST 2,2	ST 2,6	ST 2,9	ST 3,3	ST 3,5	ST 3,9	ST 4,2	ST 4,8	ST 5,5	ST 6,3	ST 8	ST 9,5
<i>P</i>	≈	0,5	0,6	0,8	0,9	1,1	1,3	1,3	1,3	1,4	1,6	1,8	1,8	2,1	2,1
<i>d</i> <sub>1</sub>	max.	1,52	1,90	2,24	2,57	2,90	3,30	3,53	3,91	4,22	4,80	5,46	6,25	8,00	9,65
	min.	1,38	1,76	2,10	2,43	2,76	3,12	3,35	3,73	4,04	4,62	5,28	6,03	7,78	9,43
<i>d</i> <sub>2</sub>	max.	0,91	1,24	1,63	1,90	2,18	2,39	2,64	2,92	3,10	3,58	4,17	4,88	6,20	7,85
	min.	0,84	1,17	1,52	1,80	2,08	2,29	2,51	2,77	2,95	3,43	3,99	4,70	5,99	7,59
<i>d</i> <sub>3</sub>	max.	0,79	1,12	1,47	1,73	2,01	2,21	2,41	2,67	2,84	3,30	3,86	4,55	5,84	7,44
	min.	0,69	1,02	1,37	1,60	1,88	2,08	2,26	2,51	2,69	3,12	3,68	4,34	5,64	7,24
<i>c</i>	max.	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,1	0,15	0,15	0,15	0,15	0,15
<i>r</i> <sup>a</sup>	≈	—	—	—	—	—	—	0,5	0,6	0,6	0,7	0,8	0,9	1,1	1,4
<i>y</i> ref. <sup>b</sup>	Type C	1,4	1,6	2	2,3	2,6	3	3,2	3,5	3,7	4,3	5	6	7,5	8
	Type F	1,1	1,2	1,6	1,8	2,1	2,5	2,5	2,7	2,8	3,2	3,6	3,6	4,2	4,2
	Type R	—	—	—	—	—	—	2,7	3	3,2	3,6	4,3	5	6,3	—
Number <sup>c</sup>		0	1	2	3	4	5	6	7	8	10	12	14	16	20
<p><sup>a</sup> Dimension <i>r</i> is a reference and has been provided for guidance only. The end may not be perfectly spherical but shall not be sharp to the touch.</p> <p><sup>b</sup> Length of incomplete thread.</p> <p><sup>c</sup> Former thread designation, for information only.</p>															

### 3 Designation

EXAMPLE A tapping screw thread with thread size ST3,5 is designated as follows:

**Tapping screw thread ISO 1478 - ST3,5**

NOTE The type of thread end should be specified within the product designation, see product standards.

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