

Tapping screws thread
(ISO 1478:1983)
English version of DIN EN ISO 1478

DIN
EN ISO 1478

ICS 21.040.30

Descriptors: Fastener, screw, tapped screw, thread end, dimensions.

Blechschrauben-Gewinde
(ISO 1478:1983)

This standard incorporates the English version of **ISO 1478**.

Supersedes DIN 7970,
November 1984 edition.

European Standard EN ISO 1478:1994 has the status of a DIN Standard.

A comma is used as the decimal marker.

National foreword

This standard has been published in accordance with a decision taken by CEN/TC 185 to adopt, without alteration, International Standard ISO 1478 as a European Standard.

The responsible German body involved in its preparation was the *Normenausschuß Mechanische Verbindungselemente* (Fasteners Standards Committee).

This standard conforms in substance to DIN 7970, now withdrawn.

Amendments

DIN 7970, November 1984 edition, has been superseded by the specifications of EN ISO 1478:1994.

Previous editions

DIN 7970: 1952-06, 1956-12, 1970-07, 1984-11.

International Patent Classification

F 16 B 025/00

UDC 621 882.8

Descriptors: Fastener, screw, tapped screw, thread end, dimensions.

English version

Tapping screws thread
(ISO 1478:1983)

Filetage de vis à tôle (ISO 1478:1983)

Blechschrauben-Gewinde
(ISO 1478:1983)

This European Standard was approved by CEN on 1994-06-20 and is identical to the ISO Standard as referred to.

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.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions. CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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

Foreword

International Standard

ISO 1478:1983 Tapping screws thread

has been taken over as a European Standard by Technical Committee CEN/TC 185 'Threaded and non-threaded mechanical fasteners and accessories' from the work of ISO/TC 2 'Fasteners' of the International Organization for Standardization (ISO). This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by January 1995 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

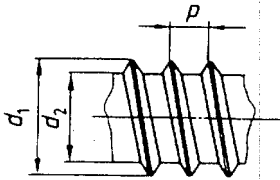
The text of the International Standard ISO 1478:1983 was approved by CEN as a European Standard without any modification.

1 Scope and field of application

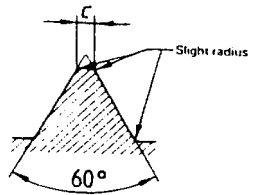
This International Standard specifies the thread and thread ends for tapping screws (sheet metal screws) with thread sizes from ST 1.5 to ST 9.5 inclusive.

2 Dimensions

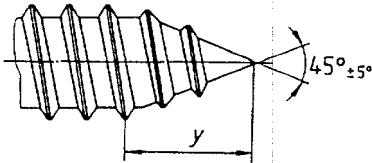
Thread (ST)



Thread profile

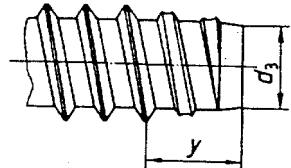


Type C cone end*
(previously type AB)



Thread ends

Type F flat end
(previously type B)



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> ₁	max. 1,52	1,90	2,24	2,57	2,9	3,3	3,53	3,91	4,22	4,8	5,46	6,25	8	9,65
	min. 1,38	1,76	2,1	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> ₂	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	7,69
<i>d</i> ₃	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>y</i> ref 1)	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
Number ²⁾	0	1	2	3	4	5	6	7	8	10	12	14	16	20

1) Length of incomplete thread.

2) For information only.

3 Designation

Example for the designation of a tapping screw thread with thread size ST 3,5:

Tapping screw thread ISO 1478 - ST 3,5

* 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.