

International Standard



1479

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

Hexagon head tapping screws

Vis à tôle à tête hexagonale

First edition — 1983-08-15

UDC 621.882.082.8

Ref. No. ISO 1479-1983 (E)

Descriptors : screw threads, hexagonal head screws, tapping screws, dimensions.

Price based on 3 pages

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been authorized has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 1479 was developed by Technical Committee ISO/TC 2, *Fasteners*, and was circulated to the member bodies in December 1981.

It has been approved by the member bodies of the following countries:

Australia	France	Netherlands
Austria	Germany, F.R.	New Zealand
Belgium	Hungary	Norway
Brazil	India	Poland
Canada	Ireland	Romania
China	Italy	South Africa, Rep. of
Czechoslovakia	Japan	Sri Lanka
Denmark	Korea, Dem. P. Rep. of	Sweden
Egypt, Arab Rep. of	Korea, Rep. of	Switzerland
Finland	Mexico	USA

The member bodies of the following countries expressed disapproval of the document on technical grounds:

United Kingdom
USSR

This International Standard cancels and replaces ISO Recommendation R 1479-1970, of which it constitutes a technical revision.

Hexagon head tapping screws

1 Scope and field of application

This International Standard specifies the characteristics of hexagon head tapping screws with thread sizes from ST 2,2 to ST 9,5 inclusive.

2 References

ISO 225, *Fasteners — Bolts, screws, studs and nuts — Symbols and designations of dimensions.*

ISO 1478, *Tapping screws thread.*

ISO 2702, *Heat-treated steel tapping screws — Mechanical properties.*

ISO 3269, *Fasteners — Acceptance inspection.*¹⁾

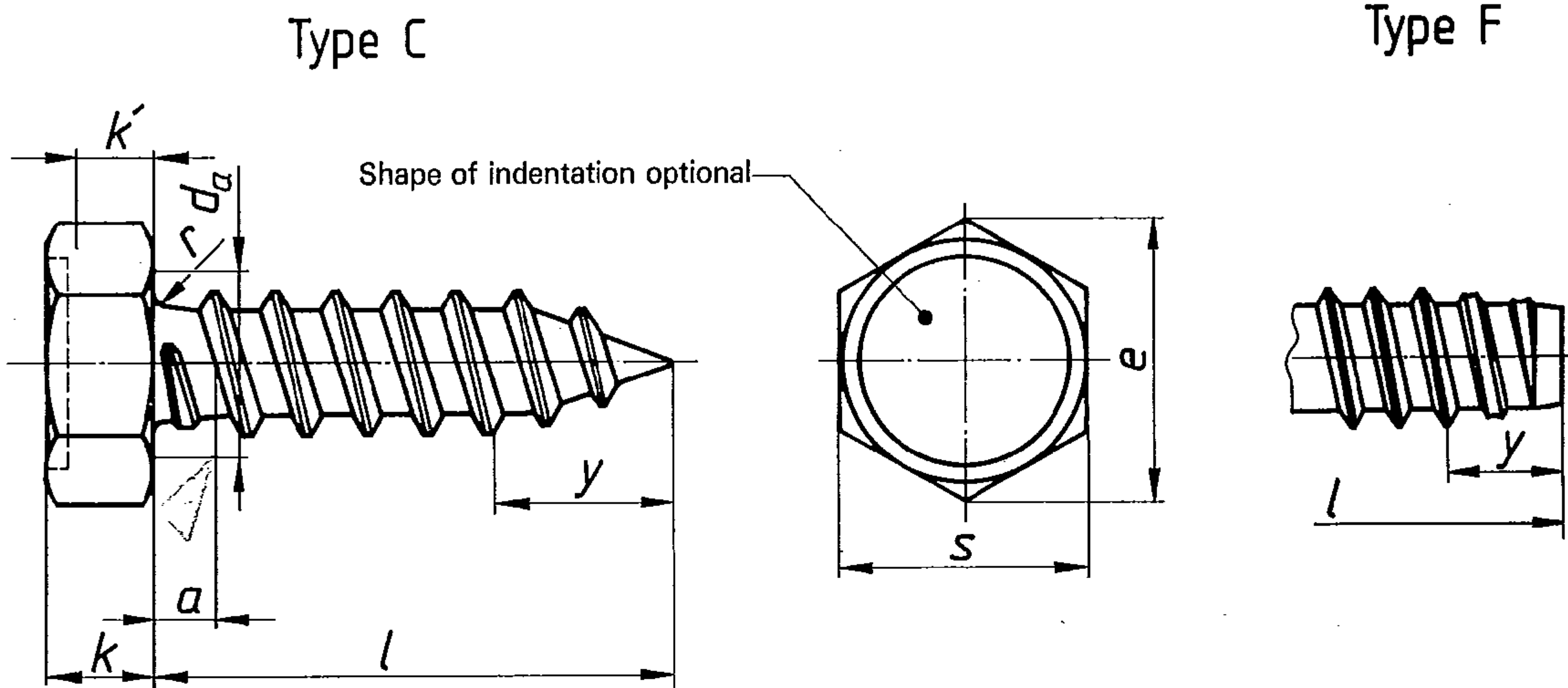
ISO 4042, *Threaded components — Electroplated coatings components.*¹⁾

ISO 4759/1, *Tolerances for fasteners — Part 1: Bolts, screws and nuts with thread diameters > 1,6 and < 150 mm and product grades A, B and C.*

¹⁾ At present at the stage of draft.

ISO 1479-1983 (E)

3 Dimensions



Dimensions in millimetres

Thread size		ST 2,2	ST 2,9	ST 3,5	ST 4,2	ST 4,8	ST 5,5	ST 6,3	ST 8	ST 9,5
P ¹⁾		0,8	1,1	1,3	1,4	1,6	1,8	1,8	2,1	2,1
a ²⁾	max.	0,8	1,1	1,3	1,4	1,6	1,8	1,8	2,1	2,1
d_a	max.	2,8	3,5	4,1	4,9	5,5	6,3	7,1	9,2	10,7
s	max.	3,2	5	5,5	7	8	8	10	13	16
	min.	3,02	4,82	5,32	6,78	7,78	7,78	9,78	12,73	15,73
e	min.	3,38	5,4	5,96	7,59	8,71	8,71	10,95	14,26	17,62
k	max.	1,6	2,3	2,6	3	3,8	4,1	4,7	6	7,5
	min.	1,3	2	2,3	2,6	3,3	3,6	4,1	5,2	6,5
k'	min.	0,9	1,4	1,6	1,8	2,3	2,5	2,9	3,6	4,5
r	min.	0,1	0,1	0,1	0,2	0,2	0,25	0,25	0,4	0,4
y ref. ³⁾	Type C	2	2,6	3,2	3,7	4,3	5	6	7,5	8
	Type F	1,6	2,1	2,5	2,8	3,2	3,6	3,6	4,2	4,2
		(4)								
nom.	Type C		Type F							
	min.	max.	min.	max.						
4,5	3,7	5,3	3,7	4,5		—	—	—	—	—
6,5	5,7	7,3	5,7	6,5						
9,5	8,7	10,3	8,7	9,5						
13	12,2	13,8	12,2	13						
16	15,2	16,8	15,2	16		Range				
19	18,2	19,8	18,2	19		of				
22	21,2	22,8	20,7	22		commercial				
25	24,2	25,8	23,7	25		lengths				
32	30,7	33,3	30,7	32						
38	36,7	39,3	36,7	38						
45	43,7	46,3	43,5	45						
50	48,7	51,3	48,5	50						

- 1) P = pitch of the thread.
- 2) Distance from the underside of the head to the first major diameter of the thread within the specified limits.
- 3) Length of incomplete thread.
- 4) Sizes with lengths marked with a dash (—) in the table shall not be manufactured.

4 Specifications and reference International Standards

Material	Steel, according to ISO 2702
Thread	According to ISO 1478
Mechanical properties	According to ISO 2702
Tolerances	Product grade A
	International Standard ISO 4759/1
Finish	Plain Requirements for electroplating are covered in ISO 4042. If different electroplating requirements are desired or if requirements are needed for other finishes, they should be negotiated between customer and supplier.
Acceptability	For acceptance procedure see ISO 3269.

5 Designation

Example for the designation of a hexagon head tapping screw with thread size ST 3,5, nominal length $l = 16$ mm and cone end type C:

Tapping screw ISO 1479 - ST 3,5 × 16 - C