EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 22341

July 1992

UDC 621.882.6

Descriptors: Fasteners, hinge pins, specifications, dimensions, designation

English version

Clevis pins with head

(ISO 2341 : 1986)

Axes d'articulation avec tête
(ISO 2341 : 1986)

Bolzen mit Kopf
(ISO 2341 : 1986)

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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.

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CEN

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

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

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Foreword

In 1992, CEN Technical Committee CEN/TC 185 'Threaded and non threaded mechanical fasteners and accessories' the secretariat of which is held by DIN decided to submit the International Standard ISO 2341 : 1986 'Clevis pins with head' to the formal vote procedure. The result was positive.

In the countries bound to implement this European Standard a national standard identical to this European Standard shall be published at the latest by 1993-01-31 and conflicting national standards shall be withdrawn at the latest by 1993-01-31.

According to the CEN/CENELEC Common Rules the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Spain, Portugal, Sweden, Switzerland and United Kingdom.

Clevis pins with head

1 Scope and field of application

This International Standard specifies the characteristics of clevis pins with head, with metric dimensions and nominal diameters, *d*, from 3 to 100 mm inclusive.

2 References

ISO 1234, *Split pins — Metric series.*

ISO 2081, *Metallic coatings — Electroplated coatings of zinc on iron or steel.*

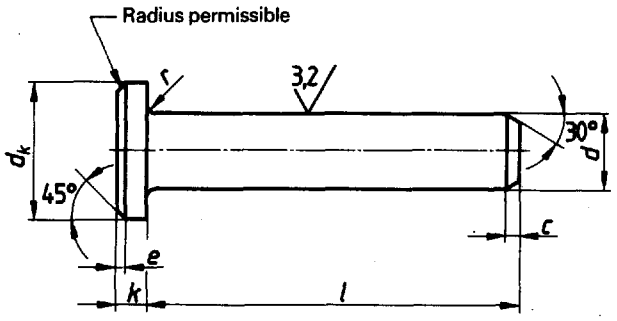
ISO 3269, *Fasteners — Acceptance inspection.*

ISO 4520, *Chromate conversion coatings on electroplated zinc and cadmium coatings.*

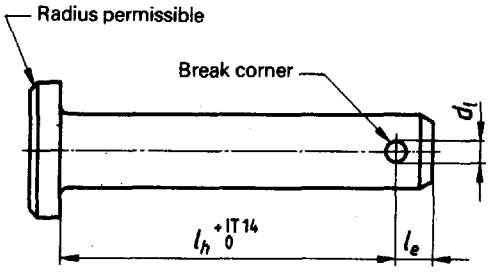
3 Dimensions

Surface roughness values in micrometres

Type A
Without split pin hole



Type B
With split pin hole



NOTES

1 Other dimensions, angles and surface roughness value, see type A.

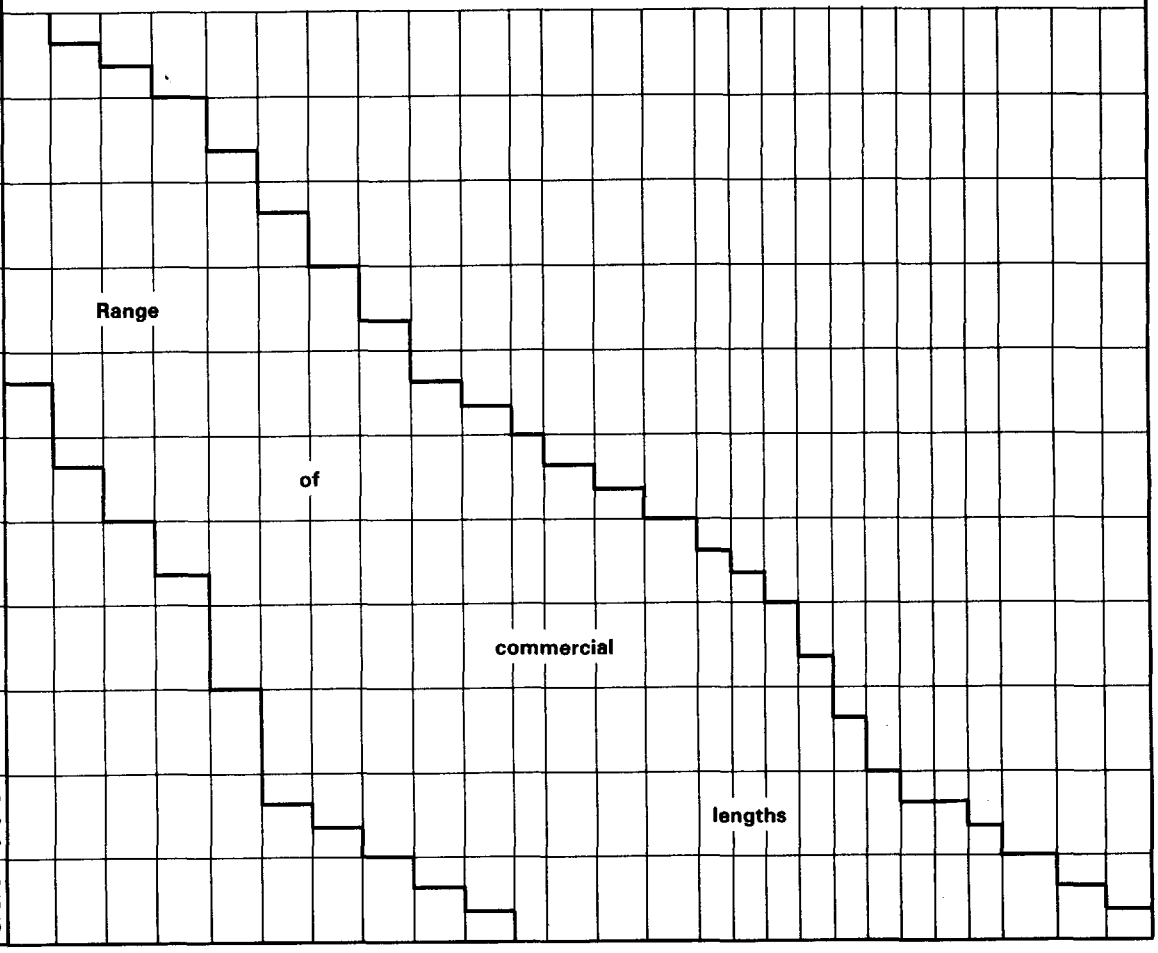
2 In cases where a distance l_h which is not in accordance with $l - l_e$ is necessary, this distance should be fixed in the designation (see clause 5), but in no case may the values for l_e be smaller than those given in the table.

NOTE – For railway applications and in cases where the split pins are subjected to alternating transverse forces, it is recommended that the next larger split pin and corresponding hole diameter to that specified be used.

Dimensions in millimetres

d	h11[1]	3	4	5	6	8	10	12	14	16	18	20	22	24	27	30	33	36	40	45	50	55	60	70	80	90	100
d_k	h14	5	6	8	10	14	18	20	22	25	28	30	33	36	40	44	47	50	55	60	66	72	78	90	100	110	120
d_1	H13[2]	0,8	1	1,2	1,6	2	3,2	3,2	4	4	5	5	5	6,3	6,3	8	8	8	8	10	10	10	10	13	13	13	13
c	max.	1	1	2	2	2	2	3	3	3	3	4	4	4	4	4	4	4	4	4	4	6	6	6	6	6	6
e	≈	0,5	0,5	1	1	1	1	1,6	1,6	1,6	1,6	2	2	2	2	2	2	2	2	2	2	3	3	3	3	3	3
k	js14	1	1	1,6	2	3	4	4	4	4,5	5	5	5,5	6	6	8	8	8	8	9	9	11	12	13	13	13	13
l_e	min.	1,6	2,2	2,9	3,2	3,5	4,5	5,5	6	6	7	8	8	9	9	10	10	10	10	12	12	14	14	16	16	16	16
r		0,6	0,6	0,6	0,6	0,6	0,6	0,6	0,6	0,6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

l[3] nom.	min.	max.
6	5,75	6,25
8	7,75	8,25
10	9,75	10,25
12	11,5	12,5
14	13,5	14,5
16	15,5	16,5
18	17,5	18,5
20	19,5	20,5
22	21,5	22,5
24	23,5	24,5
26	25,5	26,5
28	27,5	28,5
30	29,5	30,5
32	31,5	32,5
35	34,5	35,5
40	39,5	40,5
45	44,5	45,5
50	49,5	50,5
55	54,25	55,75
60	59,25	60,75
65	64,25	65,75
70	69,25	70,75
75	74,25	75,75
80	79,25	80,75
85	84,25	85,75
90	89,25	90,75
95	94,25	95,75
100	99,25	100,75
120	119,25	120,75
140	139,25	140,75
160	159,25	160,75
180	179,25	180,75
200	199,25	200,75



1) Other tolerances, for example a11, c11, f8, as agreed between customer and supplier.

2) Hole diameter d_1 = nominal size of the split pin (see ISO 1234).

3) For nominal lengths above 200 mm, steps of 20 mm.

4 Specifications and reference International Standards

Material	St = Free-cutting steel or cold-heading steel, hardness 125 to 245 HV. Other materials as agreed between customer and supplier.
Surface finish	Plain, i.e. pins to be supplied in natural finish treated with a rust-preventative lubricant, unless otherwise specified by agreement between customer and supplier.
	Preferred coatings are black oxide, phosphate coating or zinc plating with chromate conversion coating (see ISO 2081 and ISO 4520). Other coatings as agreed between customer and supplier. All tolerances shall apply prior to the application of a plating or coating.
Workmanship	Parts shall be uniform in quality and free of irregularities or detrimental defects. No burrs shall appear on any part of the pin.
Acceptability	The acceptance procedure is covered in ISO 3269.

5 Designation

Example for the designation of a clevis pin, steel, type B, with nominal diameter d = 20 mm and nominal length l = 100 mm :

Clevis pin ISO 2341 - B - 20 × 100 - St

Example for the same pin with a split pin hole of ϕ 6,3 mm :

Clevis pin ISO 2341 - B - 20 × 100 × 6,3 - St

Example for the same pin with distance l_h = 80 mm :

Clevis pin ISO 2341 - B - 20 × 100 × 6,3 × 80 - St

Example for the same pin with a standard split pin hole :

Clevis pin ISO 2341 - B - 20 × 100 × 80 - St