

Cotter bolts

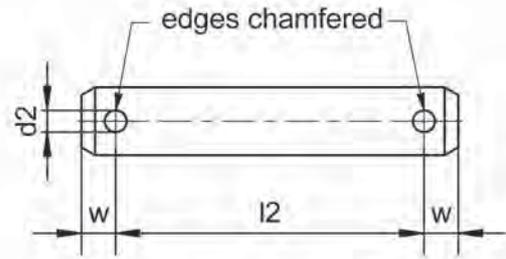
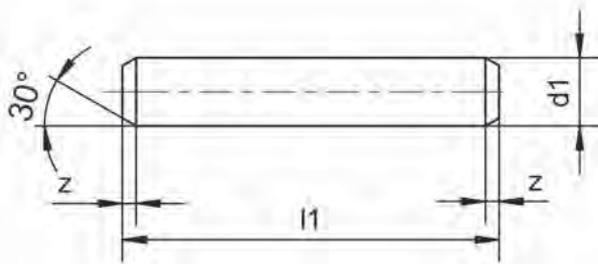


according to DIN EN 22340/ISO 2340



form A without pin holes

form B with pin holes



Example for ordering: form A: Bolt without pin holes according to DIN EN 22340/ISO 2340, d=10mm, l=30mm, electroplated galvanised yellow;
 Bolt ISO 2340 – A – 10 x 30 galvanised yellow
 Order number: 40 10 0000 0030/023

form B: Bolt with pin holes according to DIN EN 22340/ISO 2340, d=10mm, l=30mm, lh=20mm, electroplated galvanised white;
 Bolt ISO 2340 – B – 10 x 30 x 20 galvanised white
 Order number: 40 10 0030 0020/013

d h11	4	5	6	8	10	12	14	16	18	20	22	24	up to 60
dl H13	1	1.2	1.6	2	3.2	3.2	4	4	5	5	5	6.3	
c max.	1	2	2	2	2	3	3	3	3	4	4	4	
le min.	2.2	2.9	3.2	3.5	4.5	5.5	6	6	7	8	8	9	
l													
Nom. size	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	Range										
28	27.5	28.5											
30	29.5	30.5	of										
32	31.5	32.5											
35	34.5	35.5											
40	39.5	40.5	standard										
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	lengths										
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											
up to 200	upon request												upon request

Material:

1.0718 (11SMnPb30+C)
 alternative: stainless steel 1.4305 (X8CrNiS18-9) (supplement to order number .../000)
 stainless steel 1.4404 (X2CrNiMo17-12-2) (supplement to order number .../4404)
 hardened bolts upon request



Surface protection:

Identifier	Supplement to order number
bright	.../003
phosphatised oiled	.../002
electr. galvanised white (layer min. 5 µm)	.../013
electr. galvanised yellow (layer min. 5 µm)	.../023

Retaining:

form A: with retainers (mbo catalogue section 14/page 58-61)
 form B: with washers and cotter pins

Dimensions also available in acc. with DIN 1433 and DIN 1443

Special versions upon request

12_01
 12/2012

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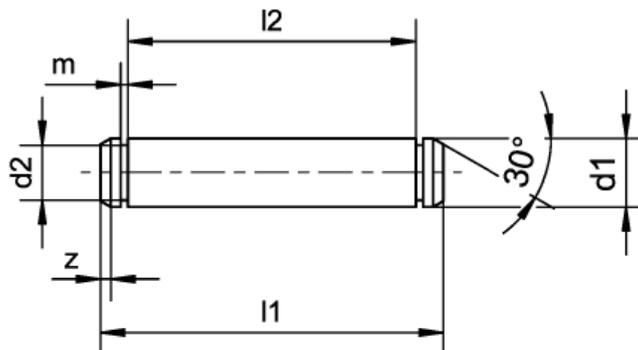
General tolerances
 DIN ISO 2768-medium

Subject to technical alterations

We accept no responsibility for incorrect or incomplete details or information given



similar to DIN EN 22340/ISO 2340 (DIN 1433, DIN 1443) with groove



dia. d1: 4 mm - 65 mm
length l1: 10 mm - 300 mm

Material:

1.0718 (11SMnPb30+C)

alternative: stainless steel 1.4305 (X8CrNiS18-9)

stainless steel 1.4404 (X2CrNiMo17-12-2)

hardened bolts upon request



Special versions upon request

Surface protection:

phosphatised and oiled;

optional: electroplated galvanised, passivated in white-blue (silver/clear) or yellow

Retaining:

with retainers

(mbo catalogue section 13/page 53-57)



12_02
08/2011

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General tolerances
DIN ISO 2768-medium

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alterations

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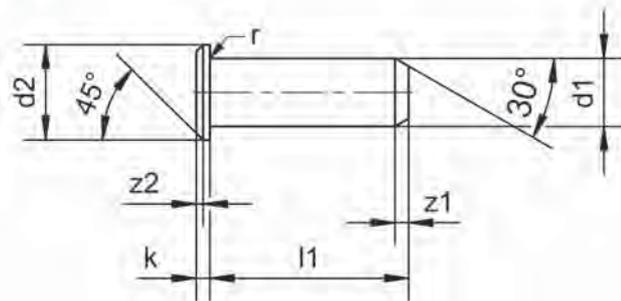


Bolts with head

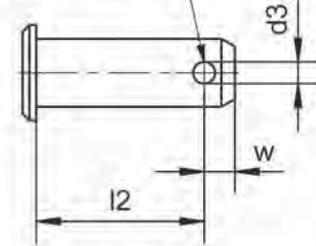


according to DIN EN 22341/ISO 2341

form A without pin hole



form B with pin hole edge chamfered



- Example for ordering:**
- form A:** Bolt without pin hole according to DIN EN 22341/ISO 2341, d=10mm, l=50mm, electroplated galvanised white;
Bolt ISO 2341 – A – 10 x 50 galvanised white, Order number: 41 10 0000 0030/013
 - form B:** Bolt with pin hole according to DIN EN 22341/ISO 2341, d=10mm, l=30mm, lh=20mm, bright;
Bolt ISO 2341 – B – 10 x 50 x 44 bright, Order number: 41 10 0050 0044/003

d h11	4	5	6	8	10	12	14	16	18	20	22	24	up to 50
dk h14	6	8	10	14	18	20	22	25	28	30	33	36	
dl H13	1	1.2	1.6	2	3.2	3.2	4	4	5	5	5	6.3	
c max.	1	2	2	2	2	3	3	3	3	4	4	4	
e ≈	0.5	1	1	1	1	1.6	1.6	1.6	1.6	2	2	2	
k js14	1	1.6	2	3	4	4	4	4.5	5	5	5.5	6	
le min.	2.2	2.9	3.2	3.5	4.5	5.5	6	6	7	8	8	9	
r	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1	1	1	1	
l													
Nom. size	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											
up to 200	upon request												

Material:

1.0718 (11SMnPb30+C)
 alternative: stainless steel 1.4305 (X8CrNiS18-9)
 (supplement to order number .../000)
 stainless steel 1.4404 (X2CrNiMo17-12-2)
 (supplement to order number .../4404)
 hardened bolts upon request



Surface protection:

Identifier	Supplement to order number
bright	.../003
phosphatised oiled	.../002
electr. galvanised white (layer min. 5 µm)	.../013
electr. galvanised yellow (layer min. 5 µm)	.../023

Retaining:

form A: with retainers
 (mbo catalogue section 14/page 58-61)
 form B: with washers and cotter pins

Dimensions also available in acc. with DIN 1434, DIN 1435, DIN 1436 and DIN 1444

Special versions upon request

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General tolerances
DIN ISO 2768-medium

Subject to technical alterations

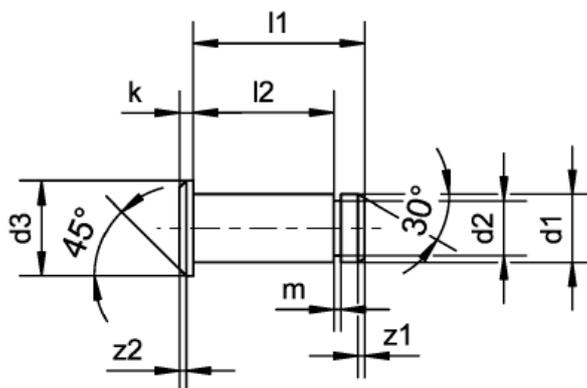
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Bolts similar to DIN EN 22341/ISO 2341
(DIN 1434, DIN 1435, DIN 1436, DIN 1444) with groove



head version of
manufacturer's choice



dia. d1: 4 mm - 50 mm
length l1: 10 mm - 300 mm

Material:

1.0718 (11SMnPb30+C)
alternative: stainless steel 1.4305 (X8CrNiS18-9)
 stainless steel 1.4404 (X2CrNiMo17-12-2)
hardened bolts upon request



Special versions upon request

Surface protection:

phosphatised and oiled;
optional: electroplated galvanised, passivated in white-blue
(silver/clear) or yellow

Retaining:

with retainers
(mbo catalogue section 13/page 53-57)



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08/2011

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General tolerances
DIN ISO 2768-medium

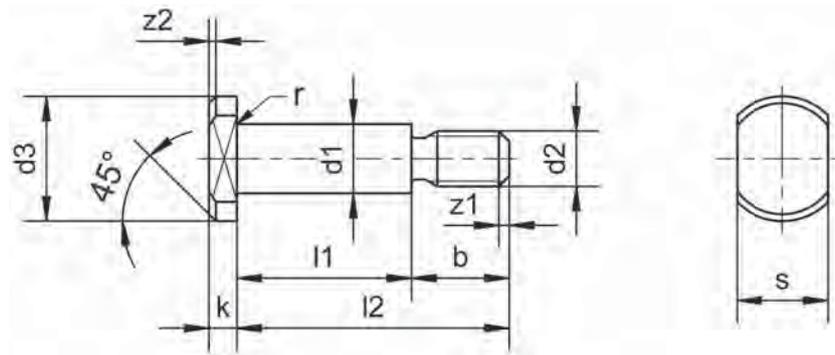
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Bolts with head and spigot

DIN 1445



Example for ordering: Bolt of diameter $d1 = 12$ mm, tolerance range $h11$, grip $l1 = 30$ mm and length $l2 = 50$ mm, of 11SMnPb30+C, electroplated galvanised white;
Bolt DIN 1445 - 12 $h11$ x 30 x 50 - St galvanised white
Order number: 45 12 0030 0050/013

Ø d1 h11	8	10	12	14	16	18	20	22	24	27	30
b min.	11	14	17	20	20	20	25	25	29	29	36
Ø d2	M 6	M 8	M 10	M 12	M 12	M 12	M 16	M 16	M 20	M 20	M 24
Ø d3 h14	14	18	20	22	25	28	30	33	36	40	44
k js14	3	4	4	4	4.5	5	5	5.5	6	6	8
r	0.6	0.6	0.6	0.6	0.6	1	1	1	1	1	1
s	11	13	17	19	22	24	27	30	32	36	36
z2 ≈	1	1	1.6	1.6	1.6	1.6	2	2	2	2	2
l2 js15	weight (7.85 kg/dm ³) kg/1000 pcs. ≈										
16											
(18)											
20											
(22)											
25											
(28)											
30											
35											
40											
45											
50											
55											
60											
65											
70											
75											
80											
85											
90											
(95)											
100											

Material:

1.0718 (11SMnPb30+C)

alternative: stainless steel 1.4305 (X8CrNiS18-9)

(supplement to order number .../000)

stainless steel 1.4404 (X2CrNiMo17-12-2)

(supplement to order number .../4404)



Surface protection:

Identifier	Supplement to order number
bright	.../003
phosphatised oiled	.../002
electr. galvanised white (layer min. 5 µm)	.../013
electr. galvanised yellow (layer min. 5 µm)	.../023

Special versions upon request

12_05
12/2012

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General tolerances
DIN ISO 2768-medium

Subject to technical alterations

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