

8th Edition

Boneham and Turner Ltd
the precision engineers



Dowel Pins & Clevis Pins

www.boneham.co.uk

Proven dedication to
precision from
Boneham & Turner Ltd



Our technicians are on hand to advise you of the best solutions from our wide range of products along with a competitive price ensuring quality, product and service Boneham & Turner are proud to provide.

We offer a next day delivery on our extensive range of standard products.

Ordering Information

For enquiries or to order:

Call Sales: 01623 445 450
Fax Sales: 01623 445 451

Our lines are manned from 8.30am until 5.30pm Monday to Friday.

Email Sales: sales@boneham.co.uk
All other: enquiries@boneham.co.uk

For online information:
www.boneham.co.uk
www.phantomdrills.co.uk
www.bonehamusa.com

Methods of Payment

To make payment easier for you, Boneham & Turner offer the following payment methods:

Credit Account

Boneham & Turner offer a 30-day credit account service. Just supply the sales team with a letterhead including your company registration number and we'll do the rest.

All major credit / debit cards accepted
BACS
Cash / cheque on Collection



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“World Class Precision”



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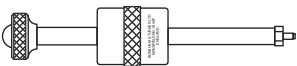
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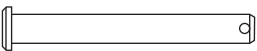
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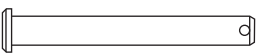
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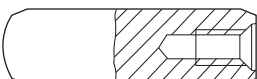
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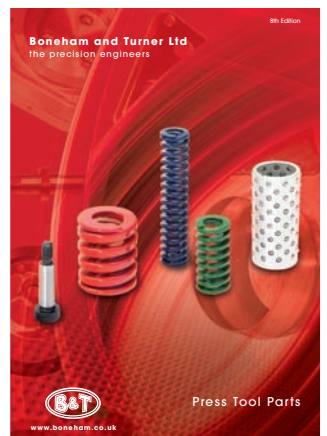
Phantom Drills



Standard Engineering Parts



Jig / Drill Bushes



Press Tool Parts



Dowel Pins



Clevis Pins



Koenig Sealing Plugs

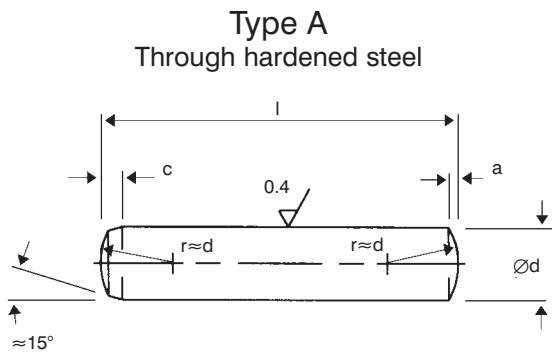


Shims

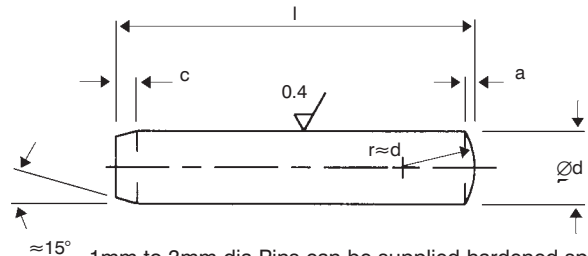


Dowel Pins Plain - METRIC

BS 8734 (1992) / ISO 8734 Limits Types A & B including additional lengths



Type B
Hardened Steel. Except 1mm to 3mm unhardened.



1mm to 3mm dia Pins can be supplied hardened specially.

Our stock is based on Type B Pins

d = m6 limit mm		Tolerances														
		+0.002 +0.009	+0.002 +0.009	+0.002 +0.009	+0.002 +0.009	+0.002 +0.009	+0.004 +0.012	+0.004 +0.012	+0.004 +0.012	+0.006 +0.015	+0.006 +0.015	+0.007 +0.018	+0.007 +0.018	+0.008 +0.021	+0.008 +0.021	
l	d															
min	max	1	1.5	2	2.5	3	4	5	6	8	10	12	16	20	25	
2.75	3.25															
3.75	4.25															
4.75	5.25															
5.75	6.25															
7.75	8.25															
9.75	10.25															
11.5	12.5															
13.5	14.5															
15.5	16.5															
17.5	18.5															
19.5	20.5															
21.5	22.5															
23.5	24.5															
24.5	25.5															
25.5	26.5															
27.5	28.5															
29.5	30.5															
31.5	32.5															
34.5	35.5															
39.5	40.5															
44.5	45.5															
49.5	50.5															
54.25	55.75															
59.25	60.75															
64.25	65.75															
69.25	70.75															
74.25	75.75															
79.25	80.75															
84.25	85.75															
89.25	90.75															
94.25	95.75															
99.25	100.75															
109.25	110.75															
119.25	120.75															

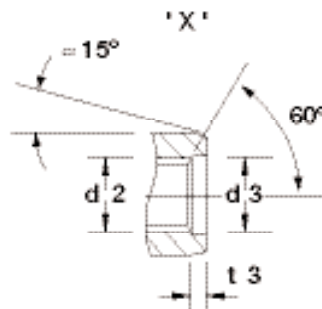
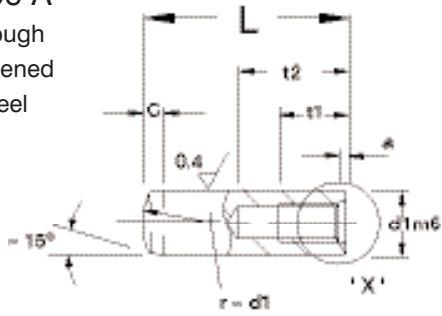
Dowel Pins can be supplied with air release flat at extra cost

Dowel Pins Tapped - METRIC

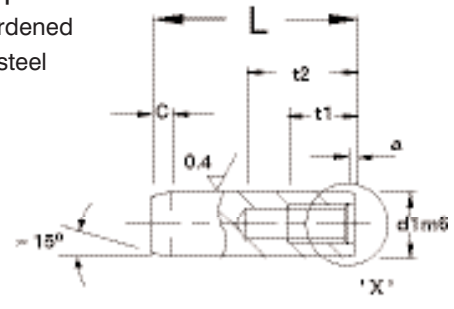


BS 8735 / ISO 8735 Limits Types A and B

Type A
through
hardened
steel



Type B
hardened
steel



Our stock is based on Type B Pins

d ¹	6	8	10	12	16	20	25	30	40	50
d = m6 Limits	+0.004 +0.012	+0.006 +0.015	+0.006 +0.015	+0.007 +0.018	+0.007 +0.018	+0.008 +0.021	+0.008 +0.021			
a ≈	0.8	1	1.2	1.6	2	2.5	3	4	5	6.3
c	2.1	2.6	3	3.8	4.6	6	6	7	8	10
d ₂	M3*	M4*	M6	M6	M8	M10	M16	M20	M20	M24
d ₃	4.3	5.3	6.4	6.4	8.4	10.5	17	21	21	25
t ₁	6	8	10	12	16	18	24	30	30	36
t ₂ min.	10	12	16	20	25	28	35	40	40	50
t ₃	1	1.2	1.2	1.2	1.5	1.5	2	2	2.5	2.5
L										
nom.	min.	max.								
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								
25	24.5	25.5								
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								

d2* to prevent cracking B&T supply 6mm and 8mm pins with smaller tapped hole size than the BS/ISO standard.

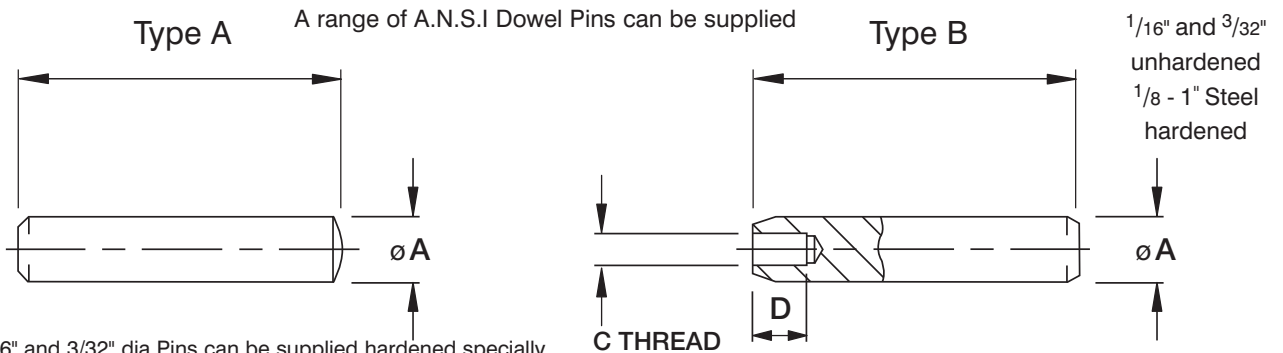
Tapped Dowel Pin Extractors available - state thread size. Dowel Pins can be supplied with air release flat at extra cost.



Dowel Pins Plain and Tapped - IMPERIAL

Plain BS 1804 Limits

Tapped



1/16" and 3/32" dia Pins can be supplied hardened specially.
Diam's 1/16" - 3/32" - 1/8" will be chamfered each end.

T = Tapped range

Diameter 'A'	1/16"	3/32"	1/8"	5/32"	3/16"	7/32"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"
'C' thread							4 B.A.	3 B.A.	2 B.A.	1/4" B.S.F.	1/4" B.S.F.	1/4" B.S.F.	
'D'							1/4"	1/4"	5/16"	3/8"	3/8"	3/8"	
'B' LENGTH	1/4"												
	5/16"												
	3/8"												
	7/16"												
	1/2"						T	T	T				
	9/16"												
	5/8"						T	T	T				
	3/4"						T	T	T	T			
	7/8"						T	T	T	T			
	1"						T	T	T	T	T		
	1 1/8"						T	T	T	T	T		
	1 1/4"						T	T	T	T	T		
	1 3/8"						T	T	T	T	T		
	1 1/2"						T	T	T	T	T	T	
	1 5/8"						T	T	T	T	T		
	1 3/4"						T	T	T	T	T	T	
	1 7/8"						T	T	T	T	T		
	2"						T	T	T	T	T	T	
	2 1/8"						T	T	T	T	T	T	
	2 1/4"						T	T	T	T	T	T	
	2 3/8"						T	T	T	T	T	T	
	2 1/2"						T	T	T	T	T	T	
	2 5/8"							T	T	T	T		
	2 3/4"						T	T	T	T	T	T	
	2 7/8"							T	T	T	T	T	
	3"						T	T	T	T	T	T	
	3 1/8"							T	T	T			
	3 1/4"							T	T	T	T	T	
	3 1/2"							T	T	T	T	T	
	3 3/4"								T	T	T	T	
4"								T	T	T	T		
4 1/4"										T	T		
4 1/2"										T	T		
5"										T	T		
5 1/4"											T		
5 1/2"											T		
6"											T		

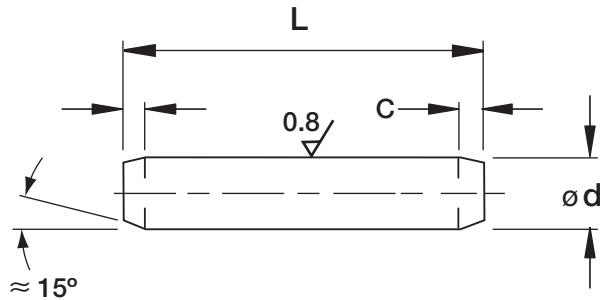
Intermediate lengths can be supplied to order.

Tapped Dowel Pin Extractors available - state thread size. Dowel Pins can be supplied with air release flat at extra cost.

Dowel Pins Plain - METRIC



ISO 2338A Stainless Steel



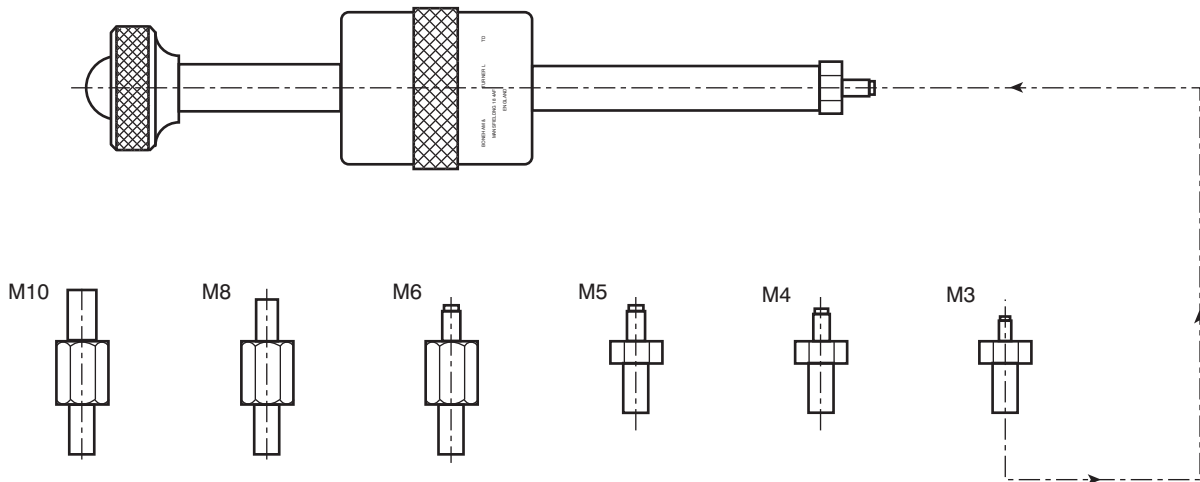
Material: Stainless Steel A2 Soft Condition.

d = m6 Limit

L	d	1mm	1.5mm	2mm	2.5mm	3mm	4mm	5mm	6mm	8mm	10mm	12mm	16mm
	c	0.2	0.3	0.35	0.4	0.5	0.63	0.8	1.2	1.6	2	2.5	3
5													
8													
10													
12													
16													
20													
24													
30													
35													
36													
40													
45													
50													
60													
80													
100													
120													

Other sizes available.

Tapped Dowel Pin Extractor

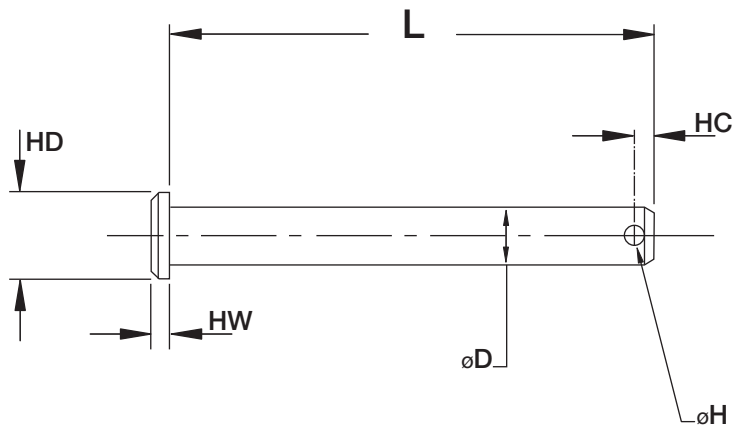


Adaptors available in sizes shown
Also available BSW, BSF, UNC, UNF, etc on request



ISO 2341 B DIN 1444 B

Material: Steel Bright Zinc Plated - Stainless Steel Type A2



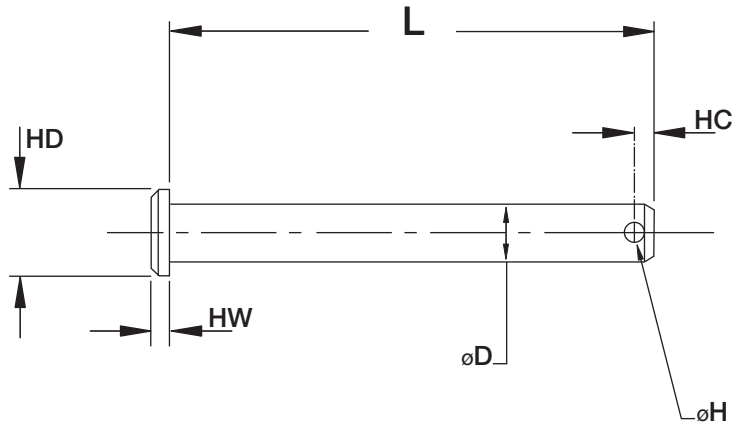
Dia	D	3	4	5	6	8	10	12	16	20	24
Head Dia	HD	4.5	6	8	10	14	18	20	25	28	36
Head Width	HW	1.2	1.5	1.6	2	3	4	4	4.5	5	6
Hole Dia	H	1.1	1.2	1.2	1.6	2	3.2	3.2	4	5	6.3
Hole Centre	HC	2.1	2.5	2.9	3.2	3.5	4.5	5.5	6	8	9

L \ D	3	4	5	6	8	10	12	16	20	24
10										
12										
16										
20										
25										
30										
35										
40										
50										
60										
70										
80										
90										
100										

Clevis Pins - IMPERIAL



Material: Steel Bright Zinc Plated - Stainless Steel Type A2

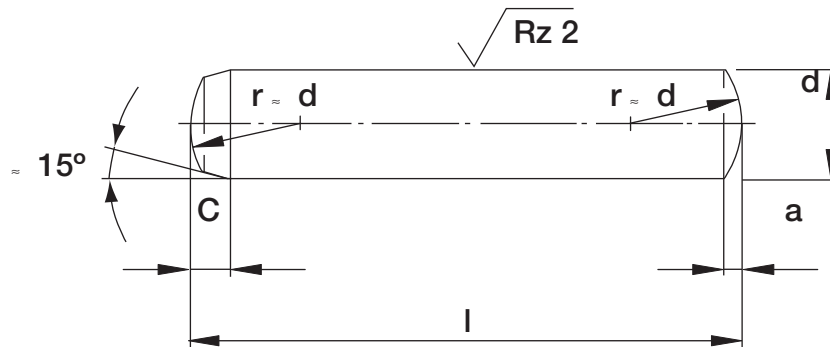


Dia	D	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"
Head Dia	HD	5/16"	3/8"	7/16"	1/2"	5/8"	11/16"	15/16"	1.3/16"
Head Width	HW	1/16"	3/32"	3/32"	1/8"	5/32"	13/64"	1/4"	11/32"
Hole Dia	H	0.078"	0.078"	0.104"	0.104"	0.135"	0.156"	0.156"	0.156"
Hole Centre	HC	0.100"	0.100"	0.140"	0.160"	0.160"	0.160"	0.160"	0.210"

L \ D	3/16"	1/4"	5/16"	3/8"	1/2"	5/8"	3/4"	1"
1/2								
5/8"								
3/4"								
1"								
1 1/4"								
1 1/2"								
1 3/4"								
2"								
2 1/4"								
2 1/2"								
2 3/4"								
3"								
3 1/4"								
3 1/2"								
3 3/4"								
4"								

DIN 6325

Fully hardened and tempered, fine ground finished to m6, turned tip and edge.



State Diameter and Length

Hardness: 60 ± 2 HRC

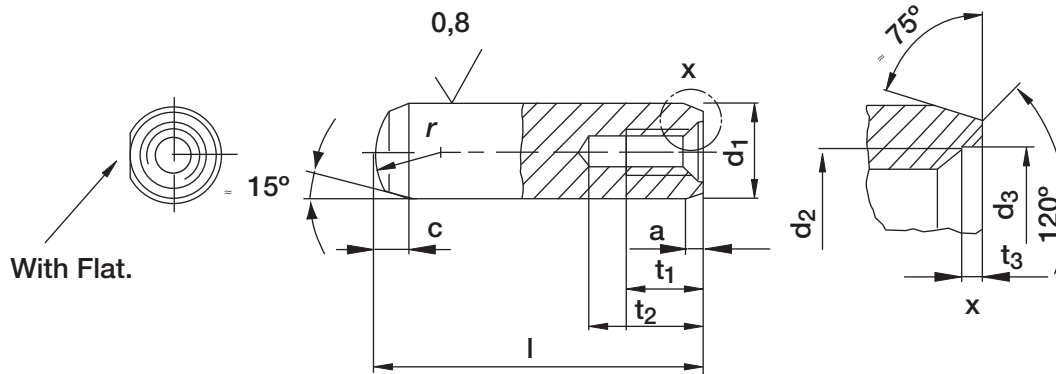
d	m6	1	1.5	2	2.5	3	4	5	6	8	10	12	16	20	
a	≈	0.12	0.20	0.25	0.3	0.4	0.5	0.63	0.8	1	1.2	1.6	2	2.5	
c		0.5	0.6	0.8	1	1.2	1.4	1.7	2.1	2.6	3	3.8	4.6	6	
r ₁	min	-	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.5	0.6	0.6	0.8	0.8	
	max	-	0.6	0.6	0.7	0.8	0.9	1	1.1	1.3	1.4	1.6	1.8	2	
Nominal Value															
I															
min															
max															
4	3.75	4.25													
5	4.75	5.25													
6	5.75	6.25													
8	7.75	8.25													
10	9.75	10.25													
12	11.50	12.50													
14	13.50	14.50													
16	15.50	16.50													
18	17.50	18.50													
20	19.50	20.50													
24	23.50	24.50													
28	27.50	28.50													
32	31.50	32.50													
35	34.50	35.50													
40	39.50	40.50													
45	44.50	45.50													
50	49.50	50.50													
55	54.25	55.75													
60	59.25	60.75													
70	69.25	70.75													
80	79.25	80.75													
90	89.25	90.75													
100	99.25	100.75													
120	119.25	120.75													

Dowel Pin with Internal thread



DIN 7979

Hardened, tempered and fine ground finished to ISO tolerance m6 with air-vent flat.



State Diameter and Length

Hardness: 600 - 700 HV1

d1 m6	6	8	10	12	16	20
r	6	8	10	12	16	20
d2	M 4	M 5	M 6	M 6	M 8	M 10
d3	4.3	5.3	6.4	6.4	8.4	10.5
t1	6	8	10	10	12	16
t2 min.	10	12	16	16	20	25
t3	1	1.2	1.2	1.2	1.5	1.5
a	0.8	1.0	1.2	1.6	2.0	2.5
c	2.1	2.6	3.0	3.8	4.6	6.0
Length l						
16						
18						
20						
24						
28						
32						
35						
40						
45						
50						
55						
60						
70						
80						
90						
100						
120						



Above is a small selection of special dowel pins - locators - shafts - ejectors etc, we manufacture to customers specific requirements.

We will be pleased to offer you our quotation upon receipt of full details.



Boneham and Turner Ltd

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