



Unbrako's line of Pull Out Dowel Pins are designed with a unique spiral groove that releases trapped air when being inserted into its application. This spiral groove ensures an easier installation, and the tapped hole in one end makes removal faster and eliminates the need for additional knockout holes.

PRODUCT ATTRIBUTES

Exclusive spiral grooves release trapped air for insertion or removal without danger of hole scoring.

No need for knockout holes.

Interchangeable with Hardened Ground Machine Dowel Pins.

Tapped hole in one end for easy pull out (ANSI B1.1).

Exclusive spiral grooves afford uniform relief for insertion and removal, reduce chances of hole scoring.

WHERE YOU WILL FIND OPPORTUNITY

Machine Building
Stamping Presses
Robotics & Automation
Mold Making

THIS PRODUCT IS OFTEN CALLED...

Threaded Dowel Pin
Hardened Ground Threaded Dowel Pin
Ground Body Dowel Pin Threaded
Hardened Threaded Dowel Pin



ADDITIONAL UNBRAKO SOCKET PRODUCTS

Socket Head Cap Screws
Socket Low Head Cap Screws
Socket Head Shoulder Screws
Button Head Socket Screws
Flat Head Countersunk Socket Screws
Flange Button Head Socket Screws
Hardened Ground Machine Dowel Pins
Socket Set Screws
Hexagon Wrenches
Taper Pressure Plugs

AVAILABLE VALUE ADDED SERVICES

Secondary & rework services including drilling and center drilling
Custom plating services available

BACKED BY THE EARNEST
Service
GUARANTEE

**The right part.
The right quantity.
On-time.
Everytime.**

UNBRAKO PULL OUT DOWEL PINS - INCH

Unbrako Pull Out Dowel Pins are manufactured in accordance with the latest revision of the following industry standards:

INCH ASME B18.3.2

(With addition of Unbrako's exclusive spiral grooves)

THREADS

Threads are made to requirements of ASME B1.1 Unified Threads (UNC) Class 2B
Thread acceptance per ASME B1.3, System 21

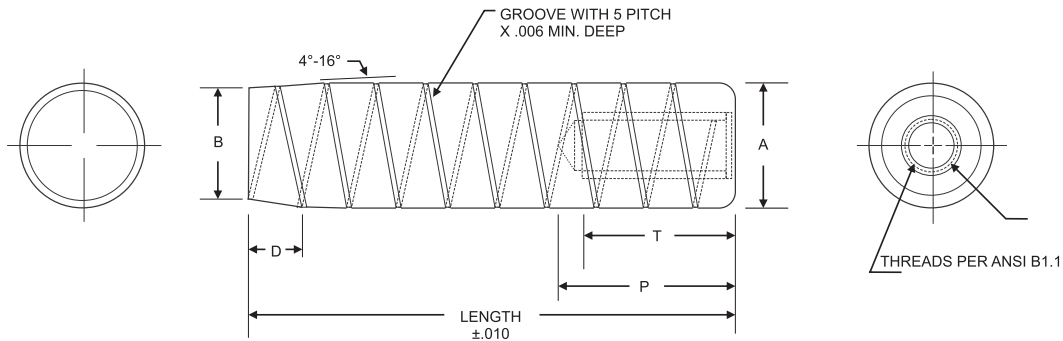
PLATING

Plain Finish
Custom plating available

*The specifications shown on this sheet are not intended to be used in the production of parts. Earnest Machine is not responsible or liable in any manner for any production errors and we certify the information present on this specification sheet is correct to the best of our knowledge.

©2021 Earnest Machine Products

DIMENSIONS FOR UNBRAKO PULL OUT DOWEL PINS



SIZE	THREAD SIZE (T)	POINT DIAMETER (B)	DIAMETER (A)		POINT LENGTH (D)	INTERNAL HOLE DEPTH (P)	THREAD DEPTH (T)
NOM	NOM	MAX	MAX	MIN	MIN	MAX	MIN
1/4	#8 - 32	0.237	0.2503	0.2501	0.031	0.500	0.212
5/16	#10 - 32	0.302	0.3128	0.3126	0.034	0.625	0.243
3/8	#10 - 32	0.365	0.3753	0.3751	0.038	0.625	0.243
7/16	#10 - 32	0.424	0.4378	0.4376	0.047	0.625	0.243
1/2	1/4 - 20	0.486	0.5003	0.5001	0.047	0.625	0.243
5/8	1/4 - 20	0.611	0.6253	0.6251	0.047	0.625	0.243
3/4	5/16 - 18	0.735	0.7503	0.7501	0.059	0.875	0.390
7/8	3/8 - 16	0.860	0.8753	0.8751	0.059	0.875	0.390
1	3/8 - 16	0.980	1.0003	1.0001	0.059	0.875	0.390

MATERIAL AND PHYSICAL PROPERTIES

Unbrako Pull Out Dowel Pins



Chemical Composition:

CARBON (C)	PHOSPHORUS (P)	SULFUR (S)
Min	Max	Max
0.33	0.035	0.040

Alloy

CONTAINS ONE OF THE FOLLOWING ALLOYS

Mn, Cr, Mo, Ni, V

Core Hardness:

ROCKWELL HARDNESS

HRC 50/58

Surface Hardness:

ROCKWELL HARDNESS

HRC 60 min

Shear Strength:

INCH

150,000 psi min

Unbrako Pull Out Dowel Pins - Inch

SIZE	SERIES	MATERIAL	FINISH	UNBRAKO PART #	EARNEST PART #
1/4x3/4	0.0002" OS	Alloy Steel	Plain	138431	964518
1/4x1	0.0002" OS	Alloy Steel	Plain	138433	964500
1/4x1-1/4	0.0002" OS	Alloy Steel	Plain	138434	964503
1/4x1-1/2	0.0002" OS	Alloy Steel	Plain	138436	964506
1/4x1-3/4	0.0002" OS	Alloy Steel	Plain	138437	964509
1/4x2	0.0002" OS	Alloy Steel	Plain	138438	964512
1/4x2-1/2	0.0002" OS	Alloy Steel	Plain	138440	964515

5/16x3/4	0.0002" OS	Alloy Steel	Plain	138441	964539
5/16x1	0.0002" OS	Alloy Steel	Plain	138443	964521
5/16x1-1/4	0.0002" OS	Alloy Steel	Plain	138444	964524
5/16x1-1/2	0.0002" OS	Alloy Steel	Plain	138445	964527
5/16x2	0.0002" OS	Alloy Steel	Plain	138447	964530
5/16x2-1/4	0.0002" OS	Alloy Steel	Plain	138448	964533
5/16x2-1/2	0.0002" OS	Alloy Steel	Plain	138449	964536

3/8x1	0.0002" OS	Alloy Steel	Plain	138451	964542
3/8x1-1/4	0.0002" OS	Alloy Steel	Plain	138452	964545
3/8x1-1/2	0.0002" OS	Alloy Steel	Plain	138453	964548
3/8x1-3/4	0.0002" OS	Alloy Steel	Plain	138454	964551
3/8x2	0.0002" OS	Alloy Steel	Plain	138455	964554
3/8x2-1/4	0.0002" OS	Alloy Steel	Plain	138456	964557
3/8x2-1/2	0.0002" OS	Alloy Steel	Plain	138457	964560
3/8x3	0.0002" OS	Alloy Steel	Plain	138458	964563

1/2x1	0.0002" OS	Alloy Steel	Plain	135459	964566
1/2x1-1/4	0.0002" OS	Alloy Steel	Plain	135460	964569
1/2x1-1/2	0.0002" OS	Alloy Steel	Plain	138461	964572
1/2x1-3/4	0.0002" OS	Alloy Steel	Plain	138462	964575
1/2x2	0.0002" OS	Alloy Steel	Plain	138463	964578
1/2x2-1/4	0.0002" OS	Alloy Steel	Plain	138464	964581
1/2x2-1/2	0.0002" OS	Alloy Steel	Plain	138465	964584
1/2x3	0.0002" OS	Alloy Steel	Plain	138466	964587
1/2x3-1/2	0.0002" OS	Alloy Steel	Plain	138467	964590
1/2x4	0.0002" OS	Alloy Steel	Plain	138468	964593

5/8x1-1/2	0.0002" OS	Alloy Steel	Plain	138469	964596
5/8x2	0.0002" OS	Alloy Steel	Plain	138471	964599
5/8x2-1/4	0.0002" OS	Alloy Steel	Plain	138472	964602
5/8x 2-1/2	0.0002" OS	Alloy Steel	Plain	138473	964605
5/8x3	0.0002" OS	Alloy Steel	Plain	138474	964608
5/8x4	0.0002" OS	Alloy Steel	Plain	138476	964611



Unbrako Pull Out Dowel Pins - Inch

SIZE	SERIES	MATERIAL	FINISH	UNBRAKO PART #	EARNEST PART #
3/4x2	0.0002" OS	Alloy Steel	Plain	138477	964614
3/4x2-1/2	0.0002" OS	Alloy Steel	Plain	138478	964617
3/4x3	0.0002" OS	Alloy Steel	Plain	138479	964620
3/4x4	0.0002" OS	Alloy Steel	Plain	138480	964623

1x2	0.0002" OS	Alloy Steel	Plain	138481	964626
1x2-1/2	0.0002" OS	Alloy Steel	Plain	138482	964629
1x3	0.0002" OS	Alloy Steel	Plain	138483	964632
1x4	0.0002" OS	Alloy Steel	Plain	138485	964635