

INCH-POUND

MS51606D

31 August 2011

SUPERSEDING

MS51606C

7 April 1989

## DETAIL SPECIFICATION SHEET

PIN, GROOVED, HEADLESS (HALF LENGTH REVERSE TAPER GROOVE)  
CORROSION-RESISTANT STEEL

This specification sheet is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification sheet and procurement specification NASM20700.

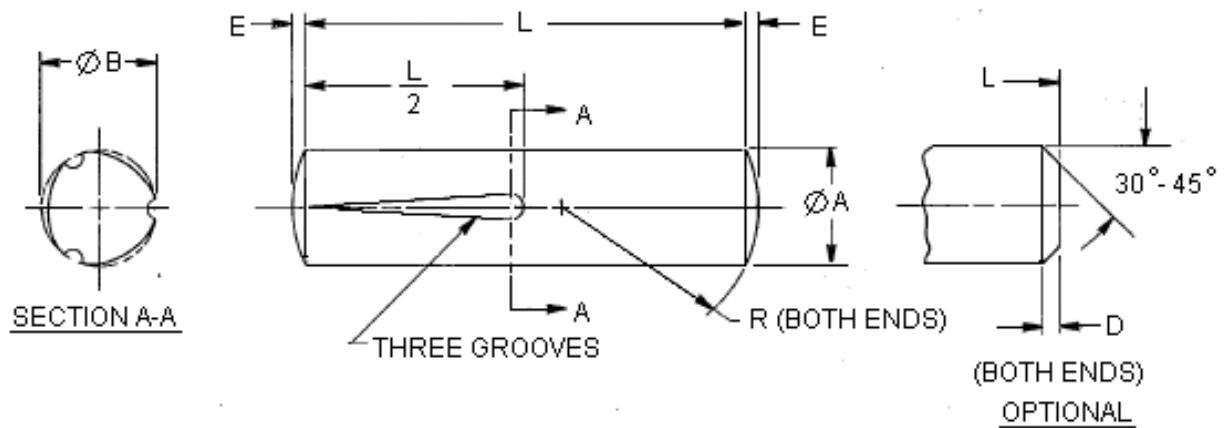


FIGURE 1. Pin.

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TABLE I. Dash Numbers and Dimensions.

ØA	.0469 +.0000 -.0010		.0625 +.0000 -.0010		.0781 +.0000 -.0010		.0938 +.0000 -.0010		.1250 +.0000 -.0020	
D CHAMFER LENGTH 1/ MIN	---		.016		.016		.016		.016	
E CROWN HEIGHT 1/ REF	---		.0065		.0087		.0091		.0130	
R RADIUS ±.010	---		.078		.094		.125		.156	
RECOMMENDED HOLE MAX	.0482		.0640		.0798		.0956		.1271	
SIZE DRIVE FIT MIN	.0469		.0625		.0781		.0938		.1250	
SINGLE SHEAR MIN	150		270		430		620		1100	
STRENGTH – LBS										
L LENGTH	DASH NO.	ØB ±.001	DASH NO.	ØB ±.001	DASH NO.	ØB ±.001	DASH NO.	ØB ±.001	DASH NO.	ØB ±.002
.375	54	.050	55	.066	56	.082	57	.099	58	.132
.500	1	.050	3	.066	8	.082	13	.099	19	.132
.625	2	.050	4	.066	9	.082	14	.099	20	.132
.750			5	.066	10	.082	15	.099	21	.132
.875			6	.066	11	.082	16	.099	22	.132
1.000			7	.066	12	.082	17	.099	23	.132
1.250							18	.099	24	.132
1.500									25	.132

ØA	.1563 +.0000 -.0020		.1875 +.0000 -.0020		.2188 +.0000 -.0020		.2500 +.0000 -.0020	
D CHAMFER LENGTH 1/ MIN	.031		.031		.031		.031	
E CROWN HEIGHT 1/ REF	.0170		.0180		.0220		.0260	
R RADIUS ±.010	.188		.250		.281		.312	
RECOMMENDED HOLE MAX	.1587		.1903		.2219		.2534	
SIZE DRIVE FIT MIN	.1563		.1875		.2188		.2500	
SINGLE SHEAR MIN	1720		2480		3380		4420	
STRENGTH – LBS								
L LENGTH	DASH NO.	ØB ±.002	DASH NO.	ØB ±.002	DASH NO.	ØB ±.002	DASH NO.	ØB ±.002
.375	59	.164	60	.195	61	.227	62	.260
.500	26	.164	33	.195	40	.227	47	.260
.625	27	.164	34	.195	41	.227	48	.260
.750	28	.164	35	.195	42	.227	49	.260
.875	29	.164	36	.195	43	.227	50	.260
1.000	30	.164	37	.195	44	.227	51	.260
1.250	31	.164	38	.195	45	.227	52	.260
1.500	32	.164	39	.195	46	.227	53	.260

1/ Ends may be crowned or chamfered or may be square with .01 to .02 radius on the ends.

## REQUIREMENTS:

1. Material: CRES 300 series in accordance with ASTM A276. Minimum ultimate shear strength 90,000 PSI.
2. Protective Coating: Passivate in accordance with SAE-AMS2700.

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3. Part Identifying Number (PIN). The pin shall consist of the MS number and a dash number taken from Table I.

Example: MS51606 - 7

Dash number

Basic MS number

MS51606-7 indicates - Pin, Grooved, Headless (Half Length Reverse Taper Grooves)  
Corrosion Resistant Steel; Length 1.000; Ø.0625

### NOTES:

1. All dimensions are in inches.
2. “ØB” is the expanded diameter as measured with a “GO” and “NOT GO” ring gage.
3. This item serves as dowel pins in applications with a blind holes.
4. In the event of a conflict between the text of this standard and the references cited herein, the text of this standard shall take precedence.
5. Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

### MILITARY INTEREST

Preparing activity:  
DLA - IS

#### Custodians:

Army – AR  
Navy – AS  
Air Force – 99

(Project 5315-2011-002)

#### Review activities:

Army - AT, AV, MI  
Navy – OS, SH

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.daps.dla.mil>