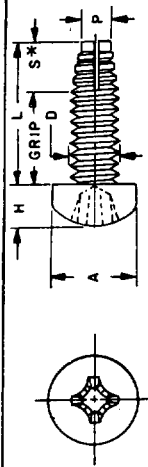


This military standard is mandatory for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document.

Review activities: MI, IS, WC, MU, AT,
82, NSA
User activities: SW, MC, GL
CODE C



OPTIONAL THREAD TYPE



TYPE D

TYPE F

TYPE G

TYPE T

ENTIRE STANDARD REVISED

P.A. ME Other Cust AIR FORCE - 82	TITLE SCREW, TAPPING-THREAD CUTTING, TYPES D, F, G OR T PAN HEAD, CROSS RECESSED, STEEL, CARBON CADMIUM PLATED	MILITARY STANDARD MS24629
PROCUREMENT SPECIFICATION FF-S-107	SUPERSEDES: MS24649 AND AN 504	SHEET 1 OF 2

DD FORM 672-1 (Coordinated)

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

FED. SUP CLASS
9309

NOMINAL SIZE	2(.086)	4(.112)	6(.138)	8(.164)	10(.190)	1/4	10(.190)	1/4
THREADS PER INCH	56	40	32	32	24	20	32	28
MAJOR DIAMETER D { MAX MIN	.0860 .0850	.1120 .1072	.1380 .1326	.1640 .1586	.1900 .1834	.2500 .2428	.1900 .1846	.2500 .2438
HEAD DIAMETER A { MAX MIN	.167 .155	.219 .205	.270 .256	.322 .306	.373 .357	.492 .473	.373 .357	.492 .473
HEAD HEIGHT H { MAX MIN	.062 .053	.080 .070	.097 .087	.115 .105	.133 .122	.175 .162	.133 .122	.175 .162
POINT DIAMETER P { MAX MIN	.067 .061	.086 .077	.106 .095	.132 .121	.147 .133	.186 .181	.147 .133	.186 .181
LENGTH L								
1/8	DASH NO. 1 GRIP MIN. .031	DASH NO. 9 GRIP MIN. .069	DASH NO. 20 GRIP MIN. .047	DASH NO. 33 GRIP MIN. .110	DASH NO. 44 GRIP MIN. .135	DASH NO. 56 GRIP MIN. .169	DASH NO. 64 GRIP MIN. .135	DASH NO. 73 GRIP MIN. .156
3/16	DASH NO. 2 GRIP MIN. .076	DASH NO. 10 GRIP MIN. .106	DASH NO. 21 GRIP MIN. .105	DASH NO. 34 GRIP MIN. .141	DASH NO. 45 GRIP MIN. .156	DASH NO. 57 GRIP MIN. .244	DASH NO. 65 GRIP MIN. .281	DASH NO. 74 GRIP MIN. .369
1/4	DASH NO. 3 GRIP MIN. .138	DASH NO. 11 GRIP MIN. .169	DASH NO. 22 GRIP MIN. .141	DASH NO. 35 GRIP MIN. .203	DASH NO. 46 GRIP MIN. .281	DASH NO. 58 GRIP MIN. .369	DASH NO. 66 GRIP MIN. .406	DASH NO. 75 GRIP MIN. .494
5/16	DASH NO. 4 GRIP MIN. .201	DASH NO. 12 GRIP MIN. .231	DASH NO. 23 GRIP MIN. .203	DASH NO. 36 GRIP MIN. .253	DASH NO. 47 GRIP MIN. .331	DASH NO. 59 GRIP MIN. .494	DASH NO. 67 GRIP MIN. .531	DASH NO. 76 GRIP MIN. .603
3/8	DASH NO. 5 GRIP MIN. .263	DASH NO. 13 GRIP MIN. .356	DASH NO. 24 GRIP MIN. .253	DASH NO. 37 GRIP MIN. .453	DASH NO. 48 GRIP MIN. .578	DASH NO. 60 GRIP MIN. .641	DASH NO. 68 GRIP MIN. .688	DASH NO. 77 GRIP MIN. .728
1/2	DASH NO. 6 GRIP MIN. .388	DASH NO. 14 GRIP MIN. .481	DASH NO. 25 GRIP MIN. .453	DASH NO. 38 GRIP MIN. .578	DASH NO. 49 GRIP MIN. .688	DASH NO. 61 GRIP MIN. .766	DASH NO. 69 GRIP MIN. .813	DASH NO. 78 GRIP MIN. .858
5/8	DASH NO. 7 GRIP MIN. .513	DASH NO. 15 GRIP MIN. .606	DASH NO. 26 GRIP MIN. .578	DASH NO. 40 GRIP MIN. .813	DASH NO. 51 GRIP MIN. .1,063	DASH NO. 62 GRIP MIN. .1,016	DASH NO. 70 GRIP MIN. .1,016	DASH NO. 79 GRIP MIN. .1,228
3/4								
7/8								
1								
1-1/4								
1-1/2								

MATERIAL: STEEL, CARBON, IN ACCORDANCE WITH PROCUREMENT SPECIFICATION.

FINISH: CADMIUM PLATED IN ACCORDANCE WITH QQ-P-416, TYPE II, CLASS 3.

THREADS: THREAD TYPES TO BE IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF PROCUREMENT SPECIFICATION.

HEAT TREATMENT: CASE HARDENED OR HEAT TREATMENT TO MEET PERFORMANCE REQUIREMENTS OF PROCUREMENT SPECIFICATION.

RECESS: THE RECESS SHALL BE IN ACCORDANCE WITH MS9006.

HOLE SIZES: FOR APPROXIMATE HOLE SIZE SEE MS24634 FOR 1/4-28 SEE ASA B18.6.4.

DIMENSIONS: ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED.

PART NUMBER: THE MS PART NUMBER CONSISTS OF THE MS NUMBER PLUS THE DASH NUMBER. EXAMPLE: MS24629-1.

*S (TAPER LENGTH) : 2-1/2 TO 3-1/2 TIMES THE PITCH DISTANCE FOR SCREWS HAVING A THREAD LENGTH OF 8 PITCHES OR LESS. TAPER LENGTH FOR LONGER LENGTHS WILL BE 3-1/2 TO 4-1/2 TIMES THE PITCH DISTANCE.

NOTES: (1) TYPE DESIGNATIONS ARE ESTABLISHED BY THE PROCUREMENT SPECIFICATION.

(2) FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.

(3) REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATIONS FOR BID.

(4) FOR AERONAUTICAL APPLICATIONS, THESE SCREWS ARE SUBJECT TO MS33749 LIMITATION AND INSTALLATION REQUIREMENTS.

APPROVED 9 OCTOBER 1959 REVISED 25 FEBRUARY 1963 28 AUGUST 1967

FED. SUP CLASS
5305

THE SCREWS COVERED BY THE FOLLOWING DASH NUMBERS LISTED IN MS24649 AND AN504 ARE CANCELLED AFTER 25 FEB 1963. USE THE DASH NUMBERS GIVEN IN SHEET 1. THE CANCELLED SCREWS CANNOT ALWAYS REPLACE THE SUPERSEDING SCREWS AND SHOULD BE USED UNTIL EXISTING STOCKS ARE DEPLETED. USE ONLY THE SUPERSEDING SCREWS FOR DESIGN AND ENGINEERING. REPLACEMENT SHALL BE IN ACCORDANCE WITH THE TABLE BELOW.

CROSS REFERENCE			
CANCELLED			SUPERSEDED BY
MS 24649	AN 504		MS 24629
DASH NO.	DASH NO.	DASH NO.	DASH NO.
1			2
2			3
3			4
10			9
11	4-4	4R4	10
12	4-5	4R5	11
13	4-6	4R6	12
14	4-8	4R8	13
15	4-10	4R10	14
16	4-12	4R12	15
21			20
22	6-4	6R4	21
23	6-5	6R5	22
24	6-6	6R6	23
25	6-8	6R8	24
26	6-10	6R10	25
27	6-12	6R12	26
28	6-14	6R14	27
29	6-16	6R16	28
32	8-4	8R4	33
33	8-5	8R5	34
34	8-6	8R6	35
35	8-8	8R8	36
36	8-10	8R10	37
37	8-12	8R12	38
38	8-14	8R14	39
39	8-16	8R16	40
	8-20	8R20	41
44	10-5	10R5	44
45	10-6	10R6	45
46	10-8	10R8	46
47	10-10	10R10	47
48	10-12	10R12	48
49	10-14	10R14	49
50	10-16	10R16	50
51	10-20	10R20	51
52	10-24	10R24	52
55			56
56	416-8	416R8	57
57	416-10	416R10	58
58	416-12	416R12	59
59	416-14	416R14	60
60	416-16	416R16	61
61	416-20	416R20	62
62	416-24	416R24	63

CROSS REFERENCE			
CANCELLED			SUPERSEDED BY
MS 24649	AN 504		MS 24629
DASH NO.	DASH NO.	DASH NO.	DASH NO.
	1032-5	1032R5	64
	1032-6	1032R6	65
	1032-8	1032R8	66
	1032-10	1032R10	67
	1032-12	1032R12	68
	1032-14	1032R14	69
	1032-16	1032R16	70
	1032-20	1032R20	71
	1032-24	1032R24	72
	428-8	428R8	73
	428-10	428R10	74
	428-12	428R12	75
	428-14	428R14	76
	428-16	428R16	77
	428-20	428R20	78
	428-24	428R24	79

APPROVED 5 OCTOBER 1959 REVISED (B) 25 FEBRUARY 1963 (C) SEE SHEET 1 AND 2 FOR CHANGES

P.A. ME	TITLE	MILITARY STANDARD
Other Cust	SCREW, TAPPING-THREAD CUTTING, TYPES	
AIR FORCE-82	D, F, G OR T PAN HEAD, CROSS RECESSED, STEEL, CARBON, CADMIUM PLATED	MS24629
PROCUREMENT SPECIFICATION FF-S-107	SUPERSEDES: MS 24649 AND AN 504	SHEET 2 OF

DD FORM 672-1 (Coordinated)

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*U.S. GOVERNMENT PRINTING OFFICE: 1967-301-512/1888