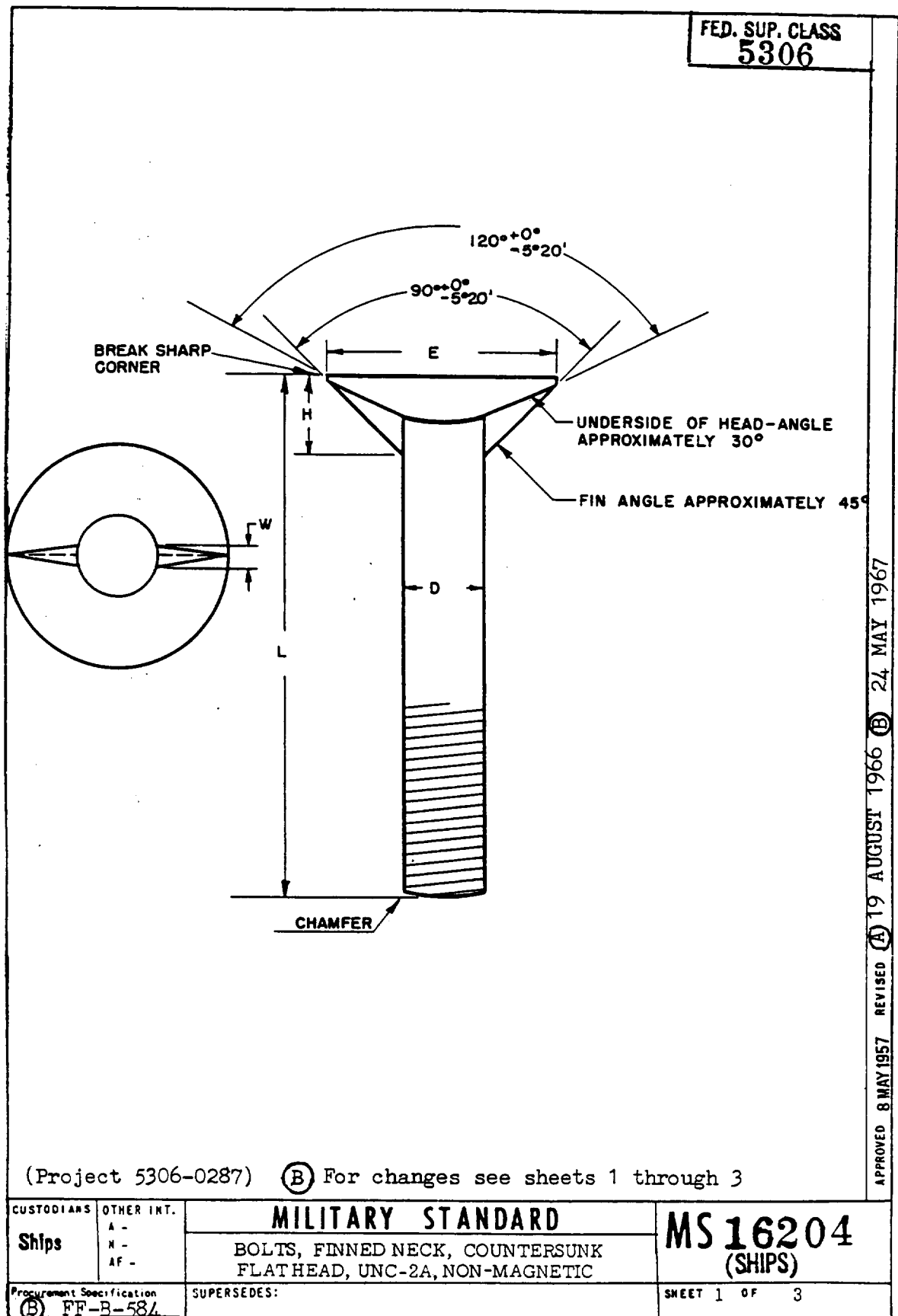


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Nominal size Threads per inch	3/8	1/2	5/8	MS part No.		FIIN		MS part No.		FIIN		MS part No.		FIIN	
				A ¹	B ²	A ¹	B ²	A ¹	B ²	A ¹	B ²	A ¹	B ²	A ¹	B ²
Head diameter (E)	Max. 0.861	1.148	1.430	11	28	11	28	11	28	11	28	11	28	11	28
Head diameter (E)	Min. 0.844	1.125	1.408	12	27	12	27	12	27	12	27	12	27	12	27
Pin height (H)	Max. 0.287	0.353	0.442	13	28	13	28	13	28	13	28	13	28	13	28
Pin height (H)	Min. 0.267	0.333	0.422	14	29	14	29	14	29	14	29	14	29	14	29
Pin width (W)	Max. 0.102	0.108	0.133	15	30	15	30	15	30	15	30	15	30	15	30
Pin width (W)	Min. 0.088	0.092	0.117	16	29	16	29	16	29	16	29	16	29	16	29
Body Diameter (D)	Max. 0.388	0.512	0.625	17	31	17	31	17	31	17	31	17	31	17	31
Body Diameter (D)	Min. 0.375	0.500	0.625	18	32	18	32	18	32	18	32	18	32	18	32
Length (L) tolerance				19	33	19	33	19	33	19	33	19	33	19	33
4	±1/16			20	34	20	34	20	34	20	34	20	34	20	34
5				21	35	21	35	21	35	21	35	21	35	21	35
6				22	36	22	36	22	36	22	36	22	36	22	36
7				23	37	23	37	23	37	23	37	23	37	23	37
8				24	38	24	38	24	38	24	38	24	38	24	38
9				25	39	25	39	25	39	25	39	25	39	25	39
10				26	40	26	40	26	40	26	40	26	40	26	40
11				27	41	27	41	27	41	27	41	27	41	27	41
12				28	42	28	42	28	42	28	42	28	42	28	42
13				29	43	29	43	29	43	29	43	29	43	29	43
14				30	44	14	44	14	44	14	44	14	44	14	44
15				31	45	15	45	15	45	15	45	15	45	15	45
16				32	46	16	46	16	46	16	46	16	46	16	46
17				33	47	17	47	17	47	17	47	17	47	17	47
18				34	48	18	48	18	48	18	48	18	48	18	48
19				35	49	19	49	19	49	19	49	19	49	19	49
20				36	50	20	50	20	50	20	50	20	50	20	50
21				37	51	21	51	21	51	21	51	21	51	21	51
22				38	52	22	52	22	52	22	52	22	52	22	52
23				39	53	23	53	23	53	23	53	23	53	23	53
24				40	54	24	54	24	54	24	54	24	54	24	54
25				41	55	25	55	25	55	25	55	25	55	25	55
26				42	56	26	56	26	56	26	56	26	56	26	56
27				43	57	27	57	27	57	27	57	27	57	27	57
28				44	58	28	58	28	58	28	58	28	58	28	58
29				45	59	29	59	29	59	29	59	29	59	29	59
30				46	60	30	60	30	60	30	60	30	60	30	60
31				47	61	31	61	31	61	31	61	31	61	31	61
32				48	62	32	62	32	62	32	62	32	62	32	62
33				49	63	33	63	33	63	33	63	33	63	33	63
34				50	64	34	64	34	64	34	64	34	64	34	64
35				51	65	35	65	35	65	35	65	35	65	35	65
36				52	66	36	66	36	66	36	66	36	66	36	66
37				53	67	37	67	37	67	37	67	37	67	37	67
38				54	68	38	68	38	68	38	68	38	68	38	68
39				55	69	39	69	39	69	39	69	39	69	39	69
40				56	70	40	70	40	70	40	70	40	70	40	70
41				57	71	41	71	41	71	41	71	41	71	41	71
42				58	72	42	72	42	72	42	72	42	72	42	72
43				59	73	43	73	43	73	43	73	43	73	43	73
44				60	74	44	74	44	74	44	74	44	74	44	74
45				61	75	45	75	45	75	45	75	45	75	45	75

¹Copper silicon alloy.
²Austenitic corrosion-resisting steel.

CUSTODIANS Ships	OTHER INT. A - N - AF -	MILITARY STANDARD		MS 16204 (SHIPS)
		BOLTS, PINNED NECK, COUNTERSUNK		
SUPERSEDES:		PLAT HEAD, UNF-2A, NON-MAGNETIC		SHEET 2
(B) FF-B-584				

APPROVED 8 MAY 1957 REVISED (B) For changes see sheets 1 through 3

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Material: Copper silicon alloy shall be in accordance with copper alloy 651 of QQ-C-591. Austenitic corrosion resisting steel shall be in accordance with class 302, 303, 304, 305, 310 or 316 of Specification QQ-S-763 or composition FS 302, 304, 310 or 316 of Specification QQ-W-423.

Magnetic permeability: The magnetic permeability of finished bolts shall not exceed 2.0 when measured with a low μ permeability indicator in accordance with Specification MIL-I-17214.

Minimum breaking strength: The minimum breaking strength of bolts made from copper silicon alloy shall be 85,000 p.s.i. The minimum breaking strength of bolts made from austenitic corrosion-resisting steel shall be 70,000 p.s.i.

Stress area: Minimum breaking strength of bolts is based upon the stress area calculated using the following formula:

$$3.1416 \left(\frac{E}{2} - \frac{3H}{16} \right)^2$$

Where:

E = Basic pitch diameter and H = Depth of sharp V thread.

Threads: Threads shall be in accordance with Handbook H-28.

Thread length: Minimum thread length - twice the nominal diameter (size) plus 1/4 inch for bolt lengths to 6 inches inclusive. Twice the nominal diameter plus 1/2 inch for bolt lengths over 6 inches. Maximum thread length equals the minimum plus 3/16 inches.

Dimensions: All dimensions are in inches, unless otherwise specified.

Packaging and packing: Packaging and packing shall be in accordance with standard commercial practice. Preservation is not required.

Finish: Corrosion-resisting steel bolts shall be passivated in accordance with QQ-P-35.

Notes:

1. Referenced documents shall be the issue in effect on date of invitation for bids.
2. In case of conflict with any referenced document, this standard shall govern.

CUSTODIANS Ships	OTHER INT. A - N - AF -	MILITARY STANDARD BOLTS, FINNED NECK, COUNTERSUNK FLAT HEAD, UNC-2A, NON-MAGNETIC		MS16204 (SHIPS)
Procurement Specification (B) FF-B-584	SUPERSEDES:	SHEET 3		

APPROVED 8 MAY 1957 REVISED (B) For changes see sheets 1 through 3