

NOTICE: When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility, nor any obligation whatsoever, and the fact that the Government may have furnished, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation or conveying any rights or permission to manufacture, use, or sell any product or invention that may in any way be related thereto.

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FED. SUP CLASS 5307					
<p>MATERIAL: MATERIAL SHALL CONFORM TO TYPE I, IDENTIFICATION SYMBOL B16 OF SPECIFICATION MIL-S-1222.</p> <p>INTENDED USE: BOLT-STUDS ARE INTENDED FOR SERVICES ABOVE 875° TO 1000° F.</p> <p>MECHANICAL PROPERTIES<sup>1</sup>: MECHANICAL PROPERTIES AFTER HEAT TREATMENT SHALL BE AS FOLLOWS:</p>					
Identification Symbol	Tensile Strength (min.) P. S. I.	Yield Point (min.) P. S. I.	Elongation in 2 inches (min.) Percent	Reduction of area (min.) Percent	Hardness <sup>(B)</sup> 255-321 BRINELL 25-34 ROCKWELL C
B16	125,000	105,000	18.0	50.0	
<p><sup>1/</sup> - QUENCHED FOLLOWED BY TEMPERING AT 1200 F. MINIMUM.</p> <p>THREADS: THREADS SHALL BE IN ACCORDANCE WITH SCREW-THREAD STANDARDS FOR FEDERAL SERVICE, HANDBOOK H28.</p> <p>NOTES:</p> <ol style="list-style-type: none"> <li>1. THE MS PART NUMBER CONSISTS OF THE MS NUMBER, PLUS THE DASH NUMBER. EXAMPLE: MS16187-1.</li> <li>2. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES.</li> <li>3. REFERENCED DOCUMENTS SHALL BE THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BIDS.</li> <li>4. FOR DESIGN FEATURE PURPOSES, THIS STANDARD TAKES PRECEDENCE OVER PROCUREMENT DOCUMENTS REFERENCED HEREIN.</li> </ol> <p>(B) FOR CHANGES SEE SHEETS 1, 2, 3, 4, 5, AND 6</p>					
<p>P. A.</p> <p>SHIPS</p> <p>Other Cust WC</p> <p>MOA</p>		<p>TITLE</p> <p>STUD, CONTINUOUS THREAD-(BOLT-STUD).</p> <p>B16 ALLOY STEEL, HIGH TEMPERATURE SERVICE</p> <p>(875°-1000°F.)</p>		<p>MILITARY STANDARD</p> <p>MS16187</p>	
<p>Procurement Specification</p> <p>MIL-S-1222</p>		<p>SUPERSEDES</p>		<p>SHEET 1 OF 6</p>	

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consents as in any manner licensing the holder or any other person or corporation, or conveying any right or permission to manufacture, use or sell any patented invention that may in any way be related thereto.

					FED. SUP CLASS 5307	
NOMINAL SIZE (D)		1/4	5/16	3/8	7/16	APPROVED 22 JANUARY 1957 REVISED (A) 30 DECEMBER 1957 (B) FOR CHANGES SEE SHEETS 1, 2, 3, 4, 5, AND 6
THREADS PER INCH		20 UNC-2A	18 UNC-2A	16 UNC-2A	14 UNC-2A	
(B) RADIUS (R)		1/4	5/16	3/8	7/16	
LENGTH (L)	LENGTH TOLERANCE	DASH NO.	DASH NO.	DASH NO.	DASH NO.	
	± 1/16					
1		1	14	27	--	
1-1/4		2	15	28	--	
1-1/2		3	16	29	40	
1-3/4		4	17	30	41	
2		5	18	31	42	
2-1/4		6	19	32	43	
2-1/2		7	20	33	44	
2-3/4		8	21	34	45	
3		9	22	35	46	
3-1/4		10	23	36	47	
3-1/2		11	24	37	48	
3-3/4		12	25	38	49	
4		13	26	39	50	
4-1/4		--	--	--	51	
4-1/2		--	--	--	52	
4-3/4		--	--	--	53	
5		--	--	--	54	
5-1/2		--	--	--	55	
6		--	--	--	56	
P.A. SHIPS Other Cust WC MOA		TITLE STUD. CONTINUOUS THREAD-(BOLT-STUD). B16 ALLOY STEEL, HIGH TEMPERATURE SERVICE (875°-1000°F.)			MILITARY STANDARD  MS15187	
Procurement Specification MIL-S-1222		SUPERSEDES:			SHEET 2	

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NOMINAL SIZE (D)		1/2	5/8	3/4	7/8
THREADS PER INCH		13 UNC-2A	11 UNC-2A	10 UNC-2A	9 UNC-2A
⑧ RADIUS (R)		1/2	5/8	3/4	7/8
LENGTH (L)	LENGTH TOLERANCE	DASH NO.	DASH NO.	DASH NO.	DASH NO.
1-1/2	± 1/16	57	--	---	---
1-3/4		58	--	---	---
2		59	--	---	---
2-1/4		60	--	---	---
2-1/2		61	80	---	---
2-3/4		62	81	---	---
3		63	82	99	---
3-1/4		64	83	100	---
3-1/2		65	84	101	---
3-3/4		66	85	102	---
4		67	86	103	116
4-1/4		68	87	104	117
4-1/2		69	88	105	118
4-3/4		70	89	106	119
5		71	90	107	120
5-1/2		72	91	108	121
6		73	92	109	122
6-1/2		74	93	110	123
7		75	94	111	124
7-1/2		76	95	112	125
8	77	96	113	126	
8-1/2	78	97	114	127	
9	79	98	115	128	
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P.A. SHIPS Other Cust WC MOA		TITLE STUD. CONTINUOUS THREAD-(BOLT-STUD). B16 ALLOY STEEL, HIGH TEMPERATURE SERVICE (875-1000°F.)		MILITARY STANDARD MS16187	
Procurement Specification MIL-S-1222		SUPERSEDES:		SHEET 3	

ment procurement operation, the United States Government thereby incurs no responsibility, nor any obligation whatsoever, and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation or conveying any rights or permission to manufacture use or sell any patented invention that may in any way be related thereto.

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					FED. SUP CLASS 5307	
NOMINAL SIZE (D)		1	1-1/8	1-1/4	1-3/8	
THREADS PER INCH		8 UNC-2A	8 UN-2A	8 UN-2A	8 UN-2A	
(B) RADIUS (R)		1	1-1/8	1-1/4	1-3/8	
LENGTH (L)	LENGTH TOLERANCE	DASH NO.	DASH NO.	DASH NO.	DASH NO.	
4-1/2	± 1/16	129	---	---	---	
4-3/4		130	---	---	---	
5		131	---	---	---	
5-1/2		132	140	---	---	
6		133	141	148	155	
6-1/2		134	142	149	156	
7		135	143	150	157	
7-1/2		136	144	151	158	
8		137	145	152	159	
8-1/2		138	146	153	160	
9		139	147	154	161	
9-1/2		---	---	---	162	
10	---	---	---	163		
10-1/2	---	---	---	164		
11	---	---	(B) 252	165		
<p>P.A. SHIPS Other Cust WC MOA</p> <p>TITLE STUD. CONTINUOUS THREAD-(BOLT-STUD). B16 ALLOY STEEL, HIGH TEMPERATURE SERVICE (875-1000°F.) (B)</p> <p>MILITARY STANDARD MS16187</p> <p>Procurement Specification MIL-8-1222</p> <p>SUPERSEDES</p> <p>SHEET 4</p>						

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NOMINAL SIZE (D)		1-1/2	1-3/4	2	2-1/4
THREADS PER INCH		8 UN-2A	8 UN-2A	8 UN-2A	8 UN-2A
⑧ RADIUS (R)		1-1/2	1-3/4	2	2-1/4
LENGTH (L)	LENGTH TOLERANCE	DASH NO.	DASH NO.	DASH NO.	DASH NO.
5	± 1/16	166	---	---	---
5-1/2		167	---	---	---
6		168	177	189	201
6-1/2		169	178	190	202
7		170	179	191	203
7-1/2		171	180	192	204
8		172	181	193	205
8-1/2		173	182	194	206
9		174	183	195	207
9-1/2		175	184	196	208
10		176	185	197	209
10-1/2		249	186	198	210
11	250	187	199	211	
12	251	188	200	212	

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P. A.	TITL STUD. CONTINUOUS THREAD—(BOLT—STUD).	MILITARY STANDARD
SHIPS Other Cust WC MOA	B16 ALLOY STEEL HIGH TEMPERATURE SERVICE (875±1000°F)	⑤ MS16187
Procurement Specification MIL-S-1222	SUPERSEDES	
		SHEET 5

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NOMINAL SIZE (D)		2-1/2
THREADS PER INCH		8 UN-2A
⑧ RADIUS (R)		2-1/2
LENGTH (L)	LENGTH TOLERANCE	DASH NO.
6	+ 1/16	213
6-1/2		214
7		215
7-1/2		216
8		217
8-1/2		218
9		219
9-1/2		220
10		221
10-1/2		222
11		223
12		224

APPROVED 22 JANUARY 1957 REVISED (A) 30 DECEMBER 1957 (B) FOR CHANGES SEE SHEETS 1, 2, 3, 4, 5, AND 6

P.A.	TITLE STUD. CONTINUOUS THREAD—(BOLT-STUD).	MILITARY STANDARD
Other Cust <b>SHIPS WC MOA</b>	<b>816 ALLOY STEEL, HIGH TEMPERATURE SERVICE (875°-1000°F)</b>	<b>MS16187</b>
Procurement Specification <b>MIL-8-1222</b>	SUPERSEDES:	SHEET 6