



TABLE 1

| NOMINAL SIZE | | .250 | .3125 | .375 | .4375 | |
|---------------------------|----------------------|---------------|---------------|---------------|---------------|-------------|
| THREADS PER INCH (-2A) | | 20UNC | 18UNC | 16UNC | 14UNC | |
| D BODY DIAMETER | MAX MIN | .260 .2127 | .324 .2712 | .388 .3287 | .452 .3850 | |
| F WIDTH ACROSS FLATS | MAX MIN | .375 .362 | .500 .484 | .5625 .544 | .625 .603 | |
| G WIDTH ACROSS CORNERS | MAX MIN | .530 .498 | .707 .665 | .795 .747 | .884 .828 | |
| H HEAD HEIGHT | MAX MIN | .188 .156 | .220 .186 | .268 .232 | .316 .278 | |
| R RADIUS | MAX | .031 | .031 | .031 | .031 | |
| TENSILE STRENGTH LBS-MIN | | 1,900 | 3,150 | 4,650 | 6,400 | |
| L LENGTH | TOLERANCE | | DASH NO. | DASH NO. | DASH NO. | DASH NO. |
| | SIZE .375 & UNDER | SIZE .4375 | | | | |
| .75 | +.02 | +.02 | 1 | 32 | 63 | |
| 1.00 | -.03 | -.03 | 2 | 33 | 64 | 94 |
| 1.25 | | | 3 | 34 | 65 | 95 |
| 1.50 | +.02 | +.04 | 4 | 35 | 66 | 96 |
| 2.00 | -.04 | -.06 | 5 | 36 | 67 | 97 |
| 2.50 | | | 6 | 37 | 68 | 98 |
| 3.00 | | | 7 | 38 | 69 | 99 |
| 3.50 | +.04 | +.06 | 8 | 39 | 70 | 100 |
| 4.00 | -.06 | -.08 | 9 | 40 | 71 | 101 |
| 4.50 | | | 10 | 41 | 72 | 102 |
| 5.00 | | | 11 | 42 | 73 | 103 |
| 5.50 | +.06 | +.08 | 12 | 43 | 74 | 104 |
| 6.00 | -.10 | -.10 | 13 | 44 | 75 | 105 |
| 6.50 | | | 14 | 45 | 76 | 106 |
| 7.00 | | | 15 | 46 | 77 | 107 |
| 7.50 | | | 16 | 47 | 78 | 108 |
| 8.00 | | | 17 | 48 | 79 | 109 |
| 8.50 | | | 18 | 49 | 80 | 110 |
| 9.00 | | | 19 | 50 | 81 | 111 |
| 9.50 | | | 20 | 51 | 82 | 112 |
| 10.00 | | | 21 | 52 | 83 | 113 |
| 11.00 | | | 22 | 53 | 84 | 114 |
| 12.00 | +.10 | +.12 | 23 | 54 | 85 | 115 |
| 13.00 | -.18 | -.18 | 24 | 55 | 86 | 116 |
| 14.00 | | | 25 | 56 | 87 | 117 |
| 15.00 | | | 26 | 57 | 88 | 118 |
| 16.00 | | | 27 | 58 | 89 | 119 |
| 17.00 | | | 28 | 59 | 90 | 120 |
| 18.00 | | | 29 | 60 | 91 | 121 |
| 19.00 | | | 30 | 61 | 92 | 122 |
| 20.00 | | | 31 | 62 | 93 | 123 |

NOTES:

- MATERIAL:** Carbon steel, SAE Grade 1 in accordance with procurement specification, having an ultimate tensile strength of 60,000 psi-min.
- PROTECTIVE COATING:** Cadmium plated in accordance with Type 2, Class 3 of QQ-P-416 or zinc coated in accordance with Type 2, Class 3 of QQ-Z-325.
- THREADS:** Threads shall be in accordance with Screw-Thread Standards for Federal Services, Handbook H24.
- THREAD LENGTH:** Minimum thread length shall be twice the basic diameter plus 0.25 inch for lengths up to and including 6.00 inches and twice the basic diameter plus 0.50 inch for lengths over 6.00 inches. Bolts too short for the formula thread length shall be threaded as close to the head as practical.
- 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: MS35355-1.
- Referenced documents shall be of the issue in effect on date of invitations for bid.
- For design feature purposes, this standard takes precedence over procurement documents referenced herein.
- For interchangeability note see sheet 2.

(B) For changes see sheets 1 and 2.

| | | |
|---------------------------------------|---|-------------------|
| P.A. WC | TITLE | MILITARY STANDARD |
| Other Cust SH 82 | BOLT, MACHINE, SQUARE HEAD, STEEL, CADMIUM OR ZINC PLATED, UNC-2A | MS35355 |
| PROCUREMENT SPECIFICATION FF-B-575 | SUPERSEDES: BAAX1, BAAX2, BAAX3, BAAX3.1, MS35354 and BAAX1.1 in part. | SHEET 1 OF 2 |

TABLE I - Continued

FED. SUP CLASS

5306

| NOMINAL SIZE | | (B) | .500 | .625 | .750 | .875 | 1.000 | 1.125 | 1.250 |
|--------------------------|-----------|------------------|-------------------|--------------------|----------|----------|----------|----------|----------|
| THREADS PER INCH (-2A) | | | 13UNC | 11UNC | 10UNC | 9UNC | 8UNC | 7UNC | 7UNC |
| D BODY DIAMETER | MAX | | .515 | .642 | .768 | .895 | 1.022 | 1.149 | 1.277 |
| | MIN | | .4435 | .5589 | .6773 | .7946 | .9100 | 1.0228 | 1.1476 |
| F WIDTH ACROSS FLATS | MAX | | .750 | .9375 | 1.125 | 1.3125 | 1.500 | 1.6875 | 1.875 |
| | MIN | | .725 | .906 | 1.088 | 1.269 | 1.450 | 1.631 | 1.812 |
| G WIDTH ACROSS CORNERS | MAX | | 1.061 | 1.326 | 1.591 | 1.856 | 2.121 | 2.386 | 2.652 |
| | MIN | | .995 | 1.244 | 1.494 | 1.742 | 1.991 | 2.239 | 2.489 |
| H HEAD HEIGHT | MAX | | .348 | .444 | .524 | .620 | .684 | .780 | .876 |
| | MIN | | .308 | .400 | .476 | .568 | .628 | .720 | .812 |
| R RADIUS | MAX | | .031 | .062 | .062 | .062 | .093 | .093 | .093 |
| TENSILE STRENGTH LBS-MIN | | (B) | 8,500 | 13,600 | 20,000 | 27,700 | 36,400 | 45,800 | 58,100 |
| L LENGTH | TOLERANCE | | | | DASH NO. | DASH NO. | DASH NO. | DASH NO. | DASH NO. |
| | SIZE .500 | SIZE .625 & .750 | SIZE .875 & 1.000 | SIZE 1.125 & 1.250 | | | | | |
| 1.00 | +.02 | | | | 124 | | | | |
| 1.25 | -.03 | | | | 125 | | | | |
| 1.50 | | | | | 126 | 159 | 192 | 230 | 268 |
| 2.00 | +.04 | +.06 | +.08 | ±.12 | 127 | 160 | 193 | 231 | 269 |
| 2.50 | -.06 | -.08 | -.10 | | 128 | 161 | 194 | 232 | 270 |
| 3.00 | | | | | 129 | 162 | 195 | 233 | 271 |
| 3.50 | +.06 | +.08 | +.10 | ±.16 | 130 | 163 | 196 | 234 | 272 |
| 4.00 | -.08 | -.10 | -.14 | | 131 | 164 | 197 | 235 | 273 |
| 4.50 | | | | | 132 | 165 | 198 | 236 | 274 |
| 5.00 | +.08 | ±.10 | +.12 | ±.18 | 133 | 166 | 199 | 237 | 275 |
| 5.50 | -.10 | | -.16 | | 134 | 167 | 200 | 238 | 276 |
| 6.00 | | | | | 135 | 168 | 201 | 239 | 277 |
| 6.50 | | | | | 136 | 169 | 202 | 240 | 278 |
| 7.00 | | | | | 137 | 170 | 203 | 241 | 279 |
| 7.50 | | | | | 138 | 171 | 204 | 242 | 280 |
| 8.00 | | | | | 139 | 172 | 205 | 243 | 281 |
| 8.50 | | | | | 140 | 173 | 206 | 244 | 282 |
| 9.00 | | | | | 141 | 174 | 207 | 245 | 283 |
| 9.50 | | | | | 142 | 175 | 208 | 246 | 284 |
| 10.00 | | | | | 143 | 176 | 209 | 247 | 285 |
| 11.00 | | | | | 144 | 177 | 210 | 248 | 286 |
| 12.00 | +.12 | +.14 | +.16 | ±.22 | 145 | 178 | 211 | 249 | 287 |
| 13.00 | -.18 | -.18 | -.20 | | 146 | 179 | 212 | 250 | 288 |
| 14.00 | | | | | 147 | 180 | 213 | 251 | 289 |
| 15.00 | | | | | 148 | 181 | 214 | 252 | 290 |
| 16.00 | | | | | 149 | 182 | 215 | 253 | 291 |
| 17.00 | | | | | 150 | 183 | 216 | 254 | 292 |
| 18.00 | | | | | 151 | 184 | 217 | 255 | 293 |
| 19.00 | | | | | 152 | 185 | 218 | 256 | 294 |
| 20.00 | | | | | 153 | 186 | 219 | 257 | 295 |
| 21.00 | | | | | 154 | 187 | 220 | 258 | 296 |
| 22.00 | | | | | 155 | 188 | 221 | 259 | 297 |
| 23.00 | | | | | 156 | 189 | 222 | 260 | 298 |
| 24.00 | | | | | 157 | 190 | 223 | 261 | 299 |
| 25.00 | | | | | 158 | 191 | 224 | 262 | 300 |
| 26.00 | | | | | | | 225 | 263 | 301 |
| 27.00 | | | | | | | 226 | 264 | 302 |
| 28.00 | | | | | | | 227 | 265 | 303 |
| 29.00 | | | | | | | 228 | 266 | 304 |
| 30.00 | | | | | | | 229 | 267 | 305 |

INTERCHANGEABILITY

Bolts specified on MS35354 are cancelled after 28 July 1966 and superseded by the bolts specified on MS35355 having the same dash numbers. Use only MS35355 bolts for new design. Cancelled bolts may be used until existing stock is depleted.

P.A. WC
Other Cust SH
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TITLE

BOLT, MACHINE, SQUARE HEAD, STEEL,
CADMIUM OR ZINC PLATED, UNC-2A

MILITARY STANDARD

MS 35355

PROCUREMENT SPECIFICATION
FF-B-575

SUPERSEDES: BAAX1, BAAX2, BAAX3, BAAX3.1, MS35354 and
BAAX1.1 in part.

SHEET 2 OF