

MS-NAS High Strength Bolts continued (Special Order Only)

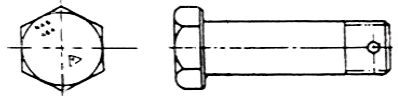
NAS464 BOLT - SHEAR CLOSE TOLERANCE ALLOY STEEL

160,000 PSI Minimum Tensile Strength

NAS464-3 #10-32	NAS464-4 1/4-28	NAS464-5 5/16-24	NAS464-5L 5/16-24	NAS464-6 3/8-24	NAS464-6L 3/8-24
NAS464-7 7/16-20	NAS464-7L 7/16-20 Long Thread	NAS464-8 1/2-20	NAS464-8L 1/2-20 Long Thread	Thru	NAS464-16L 1-12

Example Part#s

NAS464-3-11 #10-32 x 1-1/32, Unplated Shank, Drilled Shank
 NAS464P3-11 #10-32 x 1-1/32, Plated Shank, Drilled Shank
 NAS464-6L16 3/8-24 x 1-7/16, Long Thread, Unplated, Drilled Shank
 NAS464P6LA29 3/8-24 x 2-1/4, Long Thread, Plated Shank, Undrilled Shank



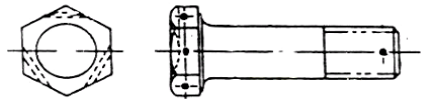
NAS1303 THRU NAS1320 BOLT - SHEAR, HEXAGON HEAD, LONG THREAD Alloy Steel

160,000 PSI Minimum Tensile Strength

NAS1303 #10-32	NAS1304 1/4-24	NAS1305 5/16-24	NAS1306 3/8-24	NAS1307 7/16-20	NAS1308 1/2-20
NAS1309 9/16-18	NAS1310 5/8-18	NAS1312 3/4-16	NAS1314 7/8-14	Thru	NAS1320 1-1/4-12

Example Part#s

NAS1308-10 1/2-20 X 1.360, Undrilled Shank, Undrilled Head
 NAS1310-27D 5/8-18 x 2.590, Drilled Shank, Undrilled Head
 NAS1310-96DH 5/8-18 x 6.902, Drilled Shank, Drilled Head
 NOTE: NAS1103/NAS1303 Series Bolts have the same grip values per dash#
 NAS1303 have longer threads, hence longer length per dash#



INTERNAL WRENCHING BOLTS

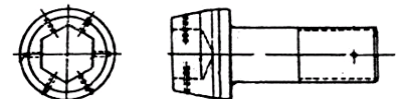
MS20004 THRU MS20024 BOLT- INTERNAL WRENCHING ALLOY STEEL

160,000 PSI Minimum Tensile Strength, 96,000 PSI Minimum Shear Strength

MS20004 1/4-28	MS20005 5/16-24	MS20006 3/8-24	MS20007 7/16-20	MS20008 1/2-20	MS20009 9/16-18
MS20010 5/8-18	MS20012 3/4-16	MS20014 7/8-14	MS20016 1-14	Thru	MS20024 1-1/2-12

Example Part#s

MS20006-18 3/8-24 X 1.812, Undrilled Head
 MS20008H96 1/2-20 X 6.812, Drilled Head



NAS144 THRU NAS158 BOLT - INTERNAL WRENCHING ALLOY STEEL

160,000 PSI Minimum Tensile Strength

NAS144 1/4-28	NAS145 5/16-24	NAS146 3/8-24	NAS147 7/16-20	NAS148 1/2-20	NAS149 9/16-18	NAS150 5/8-18
NAS152 3/4-16	NAS154 7/8-14	NAS156 1-1/4	NAS158 1-1/8-12			

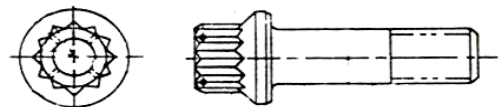
Example Part#s

NAS144-25 1/4-28 x 1-9/16, Undrilled Shank, Undrilled Head
 NAS148DH-127 1/2-20 x 7-15/16, Undrilled Shank, Drilled Head
 NAS150ADH-49 5/8-18 x 3-1/16, Drilled Shank, Drilled Head

EXTERNAL WRENCHING (12 POINT) BOLTS

BACB30MR 6AL-4V TITANIUM 160,000 PSI Tensile Strength
MS21250 Alloy Steel 180,000 PSI Tensile Strength
BACB30LE A286 Stainless 200,000 PSI Tensile Strength

The above bolts are available with Drilled or Undrilled Head.



NOTES MS-NAS bolts may be special order items as stocking levels and availability may be limited

NAS Bolts - To determine the dash # of most NAS bolts and screws, divide the dimensional thickness parts being joined (or measure the bolt grip to the end of the full cylindrical portion of shank) a divide by .0625. Example: Grip= .250/.0625 =4. MS bolts must be chart referencec