



FIRST DASH NO.	UNJF-3A THREAD	A DIA. MAX.	A1 DIA. MIN.	B	C	D DIA.		F	G (REF.)	H (REF.)	J	S (REF.)	W (REF.)	Z MAX.	RECESS SIZE	LD.	CROSS SECTION	O-RING DETAILS	
						WITH CETYL ALCOHOL LUBE	WITH HI-KOTE 1 OR I.V.D.											"A" CODE USE	"P" CODE USE
-3	.1900-32	.3813	.350	.406	.0459 .0439	.1895 .1890	.1895 .1885	.005	.305	.062	.045 .042	.032	.064 .060	.015	3	.184 .174	.027 .023	425018-6	425005-6
-4	.2500-28	.5066	.475	.469	.0733 .0713	.2495 .2490	.2495 .2485	.006	.422	.111	.054 .051	.032	.078 .074	.015	4	.244 .234	.027 .023	425018-8	425005-8
-5	.3125-24	.6335	.602	.531	.0899 .0878	.3120 .3115	.3120 .3110	.007	.490	.140	.064 .061	.046	.084 .080	.015	5	.306 .296	.037 .033	425018-10	425005-10
-6	.3750-24	.7604	.729	.641	.1167 .1147	.3745 .3740	.3745 .3735	.008	.639	.167	.088 .084	.046	.100 .096	.015	6	.369 .359	.037 .033	425018-12	425005-12
-7	.4375-20	.8884	.840	.656	.1333 .1303	.4370 .4365	.4370 .4360	.009	.715	.195	.100 .096	.046	.118 .113	.022	7	.432 .420	.048 .042	425018-14	425005-14
-8	.5000-20	1.0139	.966	.781	.1598 .1568	.4995 .4990	.4995 .4985	.010	.766	.221	.105 .101	.046	.147 .143	.022	8	.495 .483	.048 .042	425018-16	425005-16

GENERAL NOTES:

- Grip length is from top of bolt head to end of full cylindrical portion of shank. Complete threads shall begin within two thread pitches maximum which may consist of incomplete threads and extrusion angle.
- Dimensions for gage protrusion shall be inspected per NAS527.
- Head edge out of roundness shall not exceed "F" FIR.
- Point shall be flat and chamfered. Chamfer plus incomplete threads shall not exceed "S".
- "Hi-Torque" recess and recess pilot depression per MS33750. Bolt recess shall be torque tested with applicable MS33750 driver with axial end pressure not exceeding 15 lbs. Bolts are rejectable if minimum torque values listed above cause fracture of bolt or distortion which results in raise of metal at edge of slot exceeding .005 above surrounding area. Sampling shall be per MIL-STD-105, 4% AQL, Level S-1.
- Break all sharp edges and remove all burrs.
- Dimensions in inches.
- Surface texture per ANSI B46.1. Conical surface of head, head to shank fillet radius, shank and all thread elements 32 RHR maximum. All other surfaces 125 RHR maximum.
- Concentricity: Conical surface of head to "D" diameter within .002 FIR. "D" to thread pitch diameter within .0045 FIR for -3 thru -6 diameters, and within .006 FIR for -7 and -8 diameters.
- Fluorescent penetrant inspect per MIL-I-6866.
- Used with O-ring in fuel sealing applications.
- Pretreatment and dry film lube prohibited in this area.

MATERIAL:
Bolt - 6Al-4V titanium alloy per AMS4967.
O-ring - "A" Code: Fluorosilicone rubber per MIL-R-25988, Type I, Class 1, Grade 70. Temperature Range: -70°F to +350°F.
- "P" Code: Synthetic rubber per MIL-R-6855, Grade 60, Classes I & II. Temperature Range: -65°F to +225°F

HEAT TREAT: 160 KSI minimum ultimate tensile strength.

CODES AND EXAMPLE:

EXAMPLE: HT271BJA4-8M

- "M" indicates dry film lube per MIL-L-8937 on shank and threads only.
- [12] and cetyl alcohol lube. Not used with "BJ" or "CD" finish codes.
- Second dash number indicates nominal grip length in 16ths.
- First dash number indicates nominal diameter in 16ths.
- "A" indicates fluorosilicone O-ring.
- "P" indicates synthetic rubber O-ring.
- No letter indicates bolt only.
- "BJ" indicates I.V.D. aluminum coating per MIL-C-83488 and cetyl alcohol lube.
- "CD" indicates Hi-Kote 1 aluminum coating and cetyl alcohol lube.
- No code letters indicate cetyl alcohol lube only.
- Basic Part Number.

PROCUREMENT: NAS621 unless otherwise noted.

"Hi-Torque" is a registered trademark of Hi-Shear Corporation.

			TITLE	DRAWING NUMBER
DATE	BY		HI-TORQUE® BOLT 100° FLUSH SEALING HEAD 6AL-4V TITANIUM ALLOY 160 KSI TENSILE	HT271
DRAWN	10-23-70	A.H.S.		
APPROVED	11-5-70	F.M.S.		
REVISION	12-6-93	Dept 104		