

FED. SUPPLY CLASS

5306

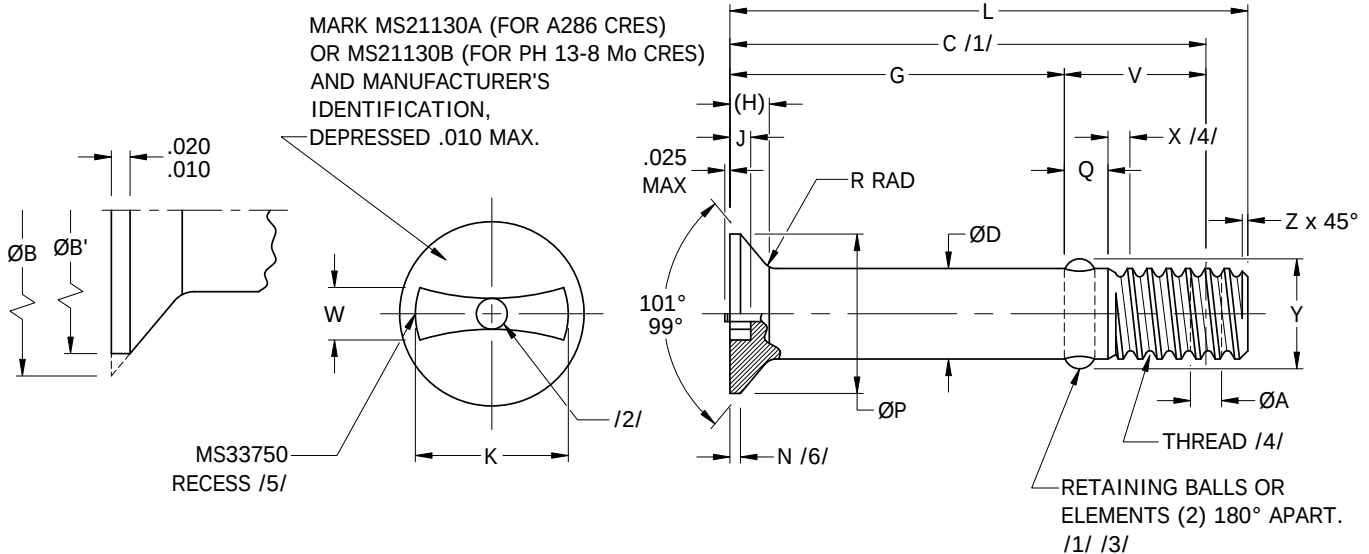


TABLE I – DIMENSIONS

DIAMETER DASH NO.	THREAD DESIGNATION AS8879	ØA		ØB	ØB'	ØD		(H)	J		K	HEAD PROTRUSION /6/			
		MAX	MIN	MAX	MIN	MAX	MIN		MAX	MIN	MAX	N		ØP	
												MAX	MIN	MAX	MIN
3	.1900-32 UNJF-3A	.080	.070	.385	.328	.1894	.1889	.080	.057	.054	.270	.0290	.0263	.3147	.3143
4	.2500-28 UNJF-3A	.086	.076	.507	.449	.2492	.2487	.108	.072	.069	.380	.0342	.0316	.4245	.4241
5	.3125-24 UNJF-3A			.635	.577	.3117	.3112	.135	.097	.094	.545	.0395	.0370	.5389	.5385
6	.3750-24 UNJF-3A	.116	.106	.762	.704	.3742	.3737	.162	.111	.107	.630	.0450	.0426	.6532	.6528
7	.4375-20 UNJF-3A			.890	.832	.4367	.4362	.190	.118	.114	.730	.0503	.0481	.7676	.7672
8	.5000-20 UNJF-3A			1.017	.959	.4991	.4986	.216	.134	.130	.815	.0557	.0537	.8820	.8816
9	.5625-18 UNJF-3A	.151	.141	1.145	1.087	.5616	.5611	.243	.149	.145	.900	.0611	.0592	.9964	.9960

TABLE I – DIMENSIONS (CONTINUED)

DIAMETER DASH NO.	THREAD DESIGNATION AS8879	Q /1/		R RAD		V BASIC	W		Y		Z		RECESS NO. /5/
		MAX	MIN	MAX	MIN		MAX	MIN	MAX	MIN			
3	.1900-32 UNJF-3A	.094	.079	.020	.015	.293	.098	.094	.225	.215	.041	.021	2
4	.2500-28 UNJF-3A	.125	.110			.333	.111	.107	.294	.284			3
5	.3125-24 UNJF-3A	.156	.141	.030	.020	.375	.147	.143	.380	.370	.057	.037	4
6	.3750-24 UNJF-3A	.171	.156			.421	.164	.160	.445	.435			5
7	.4375-20 UNJF-3A	.202	.187			.460	.193	.188	.514	.504			6
8	.5000-20 UNJF-3A	.234	.219			.523	.221	.216	.599	.589			7
9	.5625-18 UNJF-3A	.265	.250			.628	.262	.257	.671	.661	.072	.052	8

② COMPLETELY REVISED

THE INITIAL RELEASE OF THIS DOCUMENT SUPERSEDES MS21130, REVISION E. PART NUMBERS REMAIN MS21130.

THIRD ANGLE PROJECTION	CUSTODIAN NATIONAL AEROSPACE STANDARDS COMMITTEE	REVISION 2
PROCUREMENT SPECIFICATION NASM23964	TITLE BOLT, SELF-RETAINING, POSITIVE LOCKING, CRES, 90 KSI Fsu, 63 KSI Ftu, 100° FLUSH HEAD, 450 °F & 650 °F	CLASSIFICATION PART STANDARD
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MATERIAL:

MAGNETIC	- BOLT AND PLUNGER:	CRES PH 13-8 Mo (UNS S13800) PER AMS5629.
	- BALLS OR ELEMENT:	CRES 440C (UNS S44004) PER AMS-QQ-S-763.
	- SPRING:	CRES 17-7 PH (UNS S17700) PER AMS5673, OR ~~QQ-W-423~~ , CLASS FS302, ~~CONDITION B~~ 302 (UNS S30200) PER ASTM A313/A313M.
NONMAGNETIC	- BOLT AND PLUNGER:	CRES A286 (UNS S66286) PER AMS5737.
	- BALLS OR ELEMENT:	CRES 302 (UNS S30200) OR 316 (UNS S31600) PER ~~MS-S-7720-18-8 MARGINAL FOR MAG. PERM.~~ AMS-S-7720.
	- SPRING:	NICKEL-CHROMIUM-IRON ALLOY WIRE (UNS N06600 OR UNS N06690) PER ~~QQ-W-390~~ ~~CONDITION C~~ ASTM B166, OR NICKEL ALLOY (UNS N07750) PER AMS5699.

HEAT TREATMENT:

MAGNETIC	- BOLT AND PLUNGER:	PER AMS2759, CONDITION H1000, 43 TO 47 HRC.
	- BALLS:	PER AMS2759, 60 TO 62 HRC, 255 KSI.
NONMAGNETIC	- BALLS:	PER AMS2759, 25 HRC MINIMUM, 120 KSI.

FINISH: PASSIVATE CRES MATERIAL PER AMS2700, METHOD 1, CLASS 4.

LUBRICATION:

BOLT PLUNGER MANUFACTURED FROM PH 13-8 Mo AND A286 SHALL BE COATED WITH DRY FILM LUBRICANT PER AS5272.

EXAMPLE OF PART NUMBER:

MS21130 A 4 16 = .2500-28 UNJF-3A BOLT, 1.000 INCH NOMINAL GRIP, SLOTTED HEAD, CRES A286.

└── GRIP DASH NUMBER FROM TABLE II
 └── DIAMETER DASH NUMBER FROM TABLE I
 └── "A" FOR A286
 └── "B" FOR PH 13-8 Mo
 └── BASIC MS NUMBER

NOTES:

- /1/ GENERAL DIMENSION AND MECHANICAL REQUIREMENTS: COTTER PIN HOLE SHALL BE WITHIN .010 OF BOLT CENTERLINE FOR BOLTS Ø.3125 AND SMALLER; AND WITHIN .015 FOR BOLTS Ø.3750 AND LARGER. THE PIN HOLE SHALL BE PERPENDICULAR TO BOLT CENTERLINE. LOCATION OF COTTER PIN HOLE FROM TOP OF HEAD IS GIVEN BY $C = (G \text{ MIN} + V) \pm .010$. THE COTTER PIN HOLE SHALL BE PERPENDICULAR TO THE SLOT IN HEAD WITHIN 5°. ORIENTATION OF BALLS OR ELEMENT TO COTTER PIN HOLE SHALL BE IN LINE WITHIN 3°. BALL OR ELEMENT PROTRUSION FROM THE BOLT CENTERLINE SHALL BE EQUAL TO OR LESS THAN 1/2 Y MAX.
- /2/ THE RETAINING DEVICE SHALL BE RELEASED ONLY BY DEPRESSING THE PLUNGER LOCATED IN THE HEAD OF THE BOLT. MAX DIAMETER OF PLUNGER RECESS HEAD SHALL BE THE MINIMUM VALUE FOR THE "M" DIMENSIONS ON NASM33750.
- /3/ BALLS OR RETAINING ELEMENTS SHALL BE LOCATED WITHIN THE LIMITS OF "Q" DIMENSION AND AT MAXIMUM PROTRUSION SHALL FIT WITHIN THE GROOVES OF THE APPROPRIATE SPACER OF MS21126 AND MS21128 WITHOUT INTERFERING OR BINDING.

REVISION

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NAS21130

SHEET 2

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