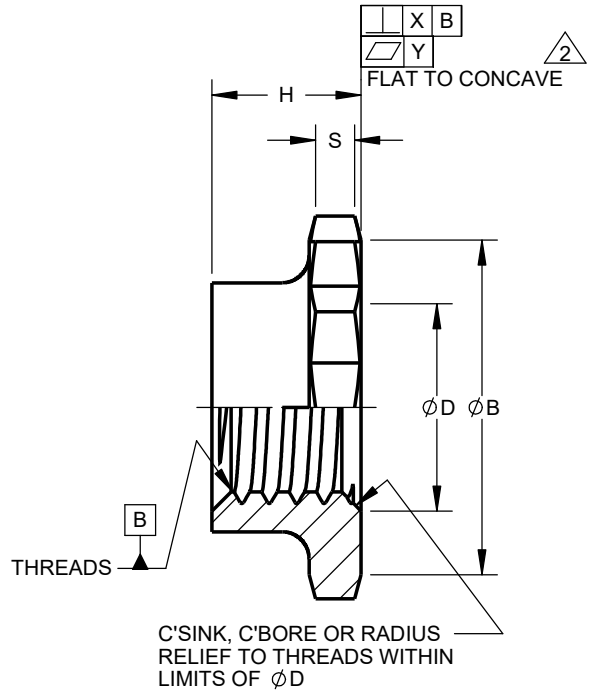
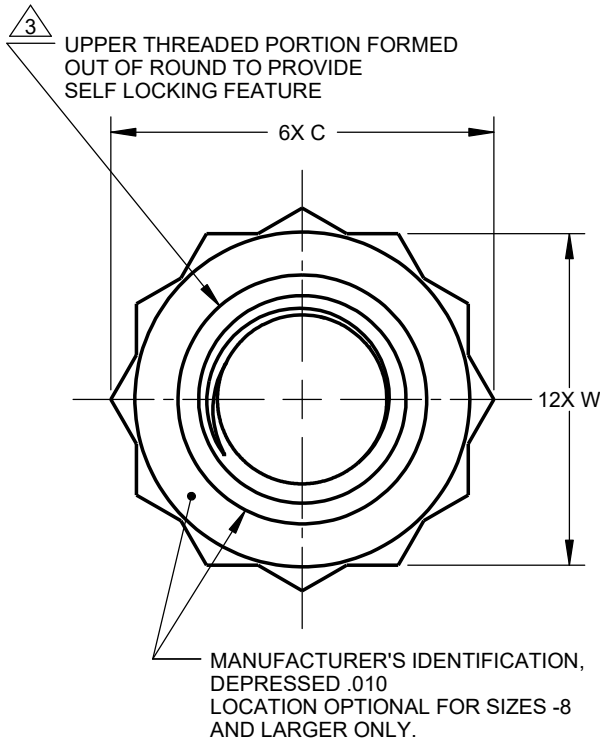


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HFS PART NO.	THREADS PER AS8879	ØB	C	ØD	H	S	W	X	Y	AXIAL TENSILE STRENGTH lbf MIN	MAXIMUM WEIGHT lbs/100	
		MIN	MIN	MAX		MIN						
H29251-	3	.1900-32UNJF-3B	.367	.419	.220	.151 .141	.028	.376 .367	.005	.002	3,500	.23
	4	.2500-28UNJF-3B	.430	.491	.280	.199 .189	.053	.439 .430	.006		6,260	.43
	5	.3125-24UNJF-3B	.492	.561	.332	.245 .235	.075	.502 .492	.007		9,920	.65
	6	.3750-24UNJF-3B	.553	.631	.405	.294 .284	.098	.564 .553	.008		14,700	.98
	7	.4375-20UNJF-3B	.679	.775	.467	.344 .334	.110	.690 .679	.009	.003	19,900	1.82
	8	.5000-20UNJF-3B	.741	.846	.530	.394 .384	.129	.752 .741	.010		26,600	2.36
	9	.5625-18UNJF-3B	.865	.987	.597	.447 .437	.137	.877 .865	.011	.004	33,700	2.98
	10	.6250-18UNJF-3B	.928	1.059	.660	.499 .489	.156	.940 .928	.012		42,200	4.32
	12	.7500-16UNJF-3B	1.052	1.200	.781	.608 .598	.290	1.064 1.052	.014		61,300	7.66
	14	.8750-14UNJF-3B	1.239	1.414	.910	.717 .707	.337	1.252 1.239	.017	.005	83,600	11.80
	1612	1.0000-12UNJF-3B	1.427	1.628	1.031	.829 .819	.394	1.440 1.427	.019		109,000	17.80
	18	1.1250-12UNJF-3B	1.614	1.842	1.156	.945 .935	.466	1.627 1.614	.021	.006	140,000	26.80
	20	1.2500-12UNJF-3B	1.801	2.056	1.281	1.060 1.050	.507	1.814 1.801	.024		174,000	38.20
	22	1.3750-12UNJF-3B	1.988	2.269	1.406	1.187 1.177	.561	2.002 1.988	.027	.007	212,000	49.50
	24	1.5000-12UNJF-3B	2.176	2.484	1.531	1.311 1.301	.623	2.190 2.176	.030		255,000	64.20

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s_H29251-1	APPROVED DATE 15AUG1997	CURRENT DESIGN ACTIVITY: HOWMET AEROSPACE	TITLE: NUT - 12 POINT, SHEAR, SELF LOCKING	CAGE CODE: 15653
	REV. LETTER AND DATE: F 03MAR2021	Howmet Fastening Systems 800 S State College Boulevard Fullerton, California, 92831 http://www.hfs.howmet.com	UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES & TO ASME Y14.5-2018 TOLERANCES: DECIMALS = ±.010; ANGLES = ±2°	SALES DRAWING No.
	CUSTOMER:			H29251-(*)

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MATERIAL: 8740 ALLOY STEEL PER AMS6322 (UNS G87400),
17-22A ALLOY STEEL PER AMS6304 (UNS K14675), OR
H-11 ALLOY STEEL PER AMS6487 (UNS T20811).

HEAT TREAT: Rc 38-45 PER AMS-H-6875.

FINISH: H29251-(*):
CADIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2, PLUS
SOLID FILM LUBE PER AS5272, TYPE I.

H29251-(*):CW:
CADIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2, PLUS WAX.

H29251X(*):
CADIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 3.

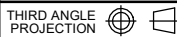
H29251E(*):
CADIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2.

H29251E(*):DL:
CADIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2, PLUS
SOLID FILM LUBE PER AS5272, TYPE I.

PERFORMANCE: LOCKING TORQUE PER NASM25027, EXCEPT AS FOLLOWS:
A) AXIAL TENSILE STRENGTH AS TABULATED.

- NOTES:**
1. 100% MAGNETIC PARTICLE INSPECTION PER ASTM E1444/E1444M.
NO MARKING REQUIRED.
 2. PERPENDICULARITY TO BE CHECKED IN ACCORDANCE WITH NASM25027.
 3. TOOL MARKS AND DISTORATION AT TOP NUT DUE TO LOCKING FEATURE PERMISSIBLE.
 4. UNLESS OTHERWISE SPECIFIED:
A) SURFACE TEXTURE 125 MICROINCHES PER ASME B46.1.

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APPROVED DATE 15AUG1997	CURRENT DESIGN ACTIVITY: HOWMET AEROSPACE Howmet Fastening Systems 800 S State College Boulevard Fullerton, California, 92831 http://www.hfs.howmet.com	TITLE: NUT - 12 POINT, SHEAR, SELF LOCKING
REV. LETTER AND DATE: F 03MAR2021		
CUSTOMER:		

CAGE CODE: 15653
SALES DRAWING No.
H29251-(*)
SHEET 2 OF 2

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE
IN INCHES & TO ASME Y14.5-2018 TOLERANCES:
DECIMALS = ±.010; ANGLES = ±2°

FILED AS: s_H29251-(-)