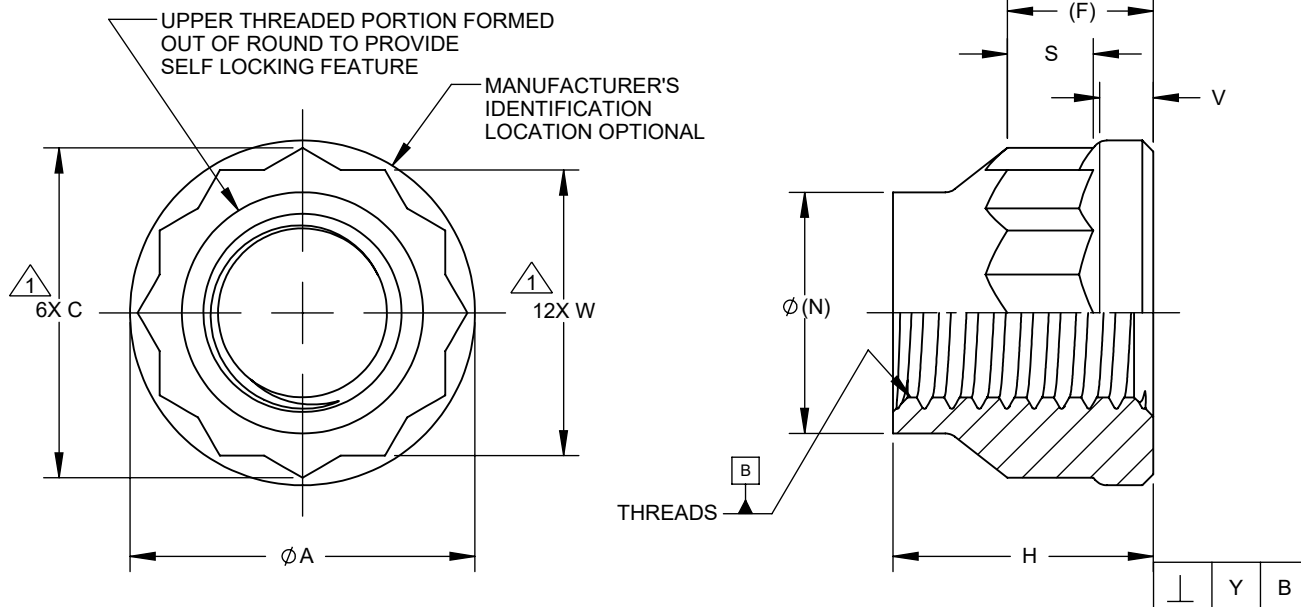


MANUFACTURE OF THE PROPRIETARY PARTS SHOWN HERE WITHOUT WRITTEN
CONSENT OF HOWMET FASTENING SYSTEMS IS ABSOLUTELY PROHIBITED.THIS DRAWING EMBODIES HOWMET FASTENING SYSTEMS CONFIDENTIAL, PROPRIETARY DESIGN & ALL DESIGN,
MANUFACTURING PRODUCTION, USE & SALE RIGHTS REGARDING SAME ARE EXPRESSLY RESERVED.

HFS PART NO.		THREADS PER AS8879	ØA MAX	C MIN	(F)	H MAX	Ø(N)	S MIN	V	W	Y	AXIAL TENSILE STRENGTH lbf MIN	APPROX WEIGHT lb / 100
H20-	4	.2500-28UNJF-3B	.460	.420	.180	.359	.304	.100	.035 MIN	.376 .367	.003	8,900	.68
	5	.3125-24UNJF-3B	.560	.491	.236	.420	.375	.125	.040 MIN	.439 .430	.004	14,100	1.11
	6	.3750-24UNJF-3B	.670	.563	.252	.467	.450	.155	.045 MIN	.502 .492	.005	20,900	1.76
	7	.4375-20UNJF-3B	.770	.635	.311	.530	.516	.165	.055 MIN	.564 .553		28,300	2.49
	8	.5000-20UNJF-3B	.870	.707	.345	.577	.584	.180	.080 MIN	.627 .618		37,800	3.37
	9	.5625-18UNJF-3B	.950	.775	.388	.632	---	.205	(.090)	.690 .679	.006	47,900	4.45
	10	.6250-18UNJF-3B	1.050	.881	.447	.687	.720	.235	.100 MIN	.783 .773		59,900	6.16
	12	.7500-16UNJF-3B	1.250	1.059	.535	.792	.845	.310	.120 MIN	.940 .928		.009	86,900
	14	.8750-14UNJF-3B	1.438	1.200	.638	.968	---	.345	(.140)	1.064 1.052	.010	119,000	14.62
	1612	1.0000-12UNJF-3B	1.625	1.343	.715	1.156		.395	(.160)	1.190 1.177	.011	154,600	21.12
	16	1.0000-14UNS-3B										157,000	

MATERIAL: ALLOY STEEL PER AMS6304 (UNS K14675), HEAT TREATED.

HEAT TREAT: Rc 44 MAXIMUM.

FINISH: H20 - (*):
CADIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 3, PLUS SOLID FILM LUBRICANT PER AS5272, TYPE I.
H20X (*):
CADIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 3, NO LUBRICATION.
H20 - (*)CW:
CADIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 3, PLUS WAX.

PERFORMANCE: NASM25027, EXCEPT AS FOLLOWS:
A) AXIAL TENSILE STRENGTH AS TABULATED, BASED ON 220 KSI, WHEN TESTED ON BOLTS HAVING MINIMUM AXIAL TENSILE STRENGTH OF 240 KSI.

TEMPERATURE: 450°F

NOTES: 1. C AND W DIMENSIONS APPLY BEFORE FORMING LOCKING FEATURE.
2. 100% MAGNETIC PARTICLE INSPECTION PER ASTM E1444. CONTAINER IDENTIFICATION REQUIRED.
3. UNLESS OTHERWISE SPECIFIED:
A) SURFACE TEXTURE 125 MICROINCHES PER ASME B46.1.
B) DEBURR AND BREAK EDGES .005-.015.

THIRD ANGLE
PROJECTION

APPROVED DATE

20JAN1969

REV. LETTER AND DATE:

C 17APR2020

CUSTOMER:

CURRENT DESIGN ACTIVITY:



Howmet Fastening Systems
800 S State College Boulevard
Fullerton, California, 92831

<http://www.hfs.howmet.com>

TITLE:

NUT - 12 POINT,
SELF LOCKING,
220 KSI

UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE
IN INCHES & TO ASME Y14.5-2018 TOLERANCES:
DECIMALS = ±.015; ANGLES = ±2°

CAGE CODE: 15653

SALES DRAWING No.

H20-(*)

SHEET 1 OF 1

FILED AS:

s_ H20-(*)