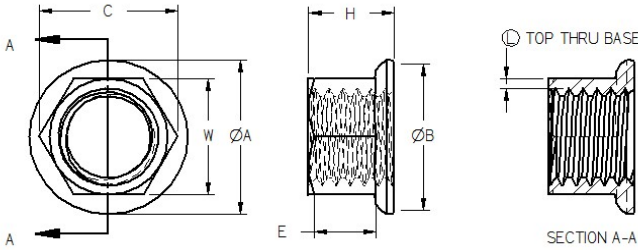
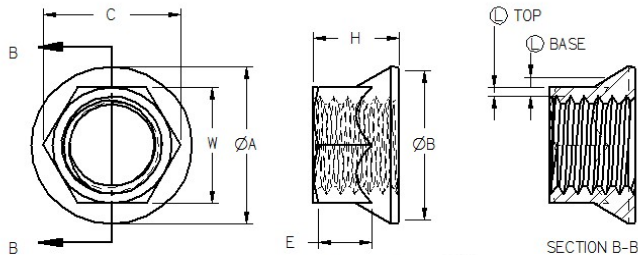


ENGINEERING SOLUTIONS



PRIOR ART OLD STYLE A

NOTE: MAY REQUIRE GREATER THAN HRC 45 TO ACHIEVE MIN. AXIAL TENSILE



STYLE B

MS21042L6
OLD STYLE A
CADMIUM,
CHROMATE, LUBE



MS21042-6
OLD STYLE A
CADMIUM,
CHROMATE

MS21042L6
STYLE B
CADMIUM,
CHROMATE, LUBE



MS21042-6
STYLE B
CADMIUM,
CHROMATE

COMMON MS OR NAS PART NUMBERS	THREAD /3/ CUT AS 8879	THREAD COUNT MAX	DIAMETER TO HEIGHT % RATIO	LEAST MATERIAL CONDITION			A		C		E		H - HEIGHT		W - FLATS		AXIAL TENSILE LBS/MIN	TORQUE IN/LBS MIN-MAX	MAX WEIGHT LBS/EACH
				TOP	BASE	% RATIO INCREASE	MAX	MIN	MIN	MIN	MAX	MIN	MAX	MIN					
MS21042L02	.0860-56 UNJC-3B	5.600	116%	0.014	0.022	57%	0.167	0.137	0.138	0.045	0.100	0.080	0.127	0.122	670	.2-2.5	0.0002		
MS21042L04	.1120-40 UNJC-3B	5.000	112%	0.015	0.026	73%	0.206	0.176	0.171	0.050	0.125	0.103	0.158	0.150	1,110	.5-5.0	0.0005		
MS21042L06	.1380-32 UNJC-3B	4.512	102%	0.020	0.032	60%	0.244	0.214	0.207	0.055	0.141	0.115	0.190	0.181	1,670	1.0-10.0	0.0008		
MS21042L08	.1640-32 UNJC-3B	6.016	115%	0.020	0.035	75%	0.290	0.260	0.244	0.060	0.188	0.125	0.221	0.213	2,490	1.5-15.0	0.0015		
MS21042L3	.1900-32 UNJF-3B	6.016	99%	0.024	0.043	79%	0.330	0.290	0.277	0.065	0.188	0.154	0.252	0.243	3,470	2.0-18.0	0.0018		
MS21042L4	.2500-28 UNJF-3B	6.132	88%	0.024	0.050	108%	0.420	0.386	0.347	0.090	0.219	0.204	0.316	0.304	6,200	3.5-30.0	0.0035		
MS21042L5	.3125-24 UNJF-3B	6.384	85%	0.023	0.057	147%	0.520	0.482	0.419	0.120	0.266	0.251	0.378	0.367	9,820	6.5-60.0	0.0060		
MS21042L6	.3750-24 UNJF-3B	6.768	75%	0.024	0.066	175%	0.620	0.575	0.491	0.125	0.282	0.267	0.440	0.430	15,200	9.5-80.0	0.0080		
NAS1291-7	.4375-20 UNJF-3B	6.560	75%	0.024	0.074	208%	0.708	0.680	0.562	0.160	0.328	0.313	0.504	0.494	20,600	14.0-100	0.0130		
NAS1291-8	.5000-20 UNJF-3B	8.200	82%	0.024	0.085	254%	0.814	0.786	0.633	0.225	0.410	0.350	0.566	0.556	27,500	18.0-150	0.0210		
NAS1291-9	.5625-18 UNJF-3B	8.640	85%	0.054	0.107	98%	0.912	0.874	0.775	0.320	0.480	0.420	0.692	0.680	34,800	24.0-200	0.0360		
NAS1291-10	.6250-18 UNJF-3B	9.900	88%	0.055	0.118	114%	1.014	0.976	0.846	0.365	0.550	0.490	0.755	0.743	43,600	32.0-300	0.0450		

DESIGN NOTES STYLE B: (L) SYMBOL DENOTES LEAST MATERIAL CONDITION.

1. HYDROGEN EMBRITTLEMENT MINIMIZED BY LOWER HRC HARDNESS REQUIREMENTS WITH STYLE B SHAPE DESIGN.
2. PERFORMANCE CONFORMS TO NASM25027 REQUIREMENTS.
3. MATERIAL ALLOY STEEL PER SPECIFICATION RECOMMENDED UNS G40370 PER AMS6300 OR UNS G87400 PER AMS6322.
4. HEAT TREATMENT PER AMS2759, HRC 43 MAX, TO CONFORM AMS-QQ-P-416C, SECTION 6.2.1 PLATING USAGE REQUIREMENTS.
5. FINISH CADMIUM PLATED PER AMS-QQ-P-416, TYPE 2, CLASS 2, RECOMMENDED BAKE WITHIN 1 HOUR AFTER PLATING 24 HOURS 375°F.
6. ADD FINISH CODE OR L TO BASIC PART NUMBER FOR POST LUBE PER AS5272C, TYPE 1 AND BAKE 1 HOUR 375°F.
7. C AND W DIMENSIONS APPLY BEFORE FORMING OF SELF LOCKING FEATURE.
8. STYLE B TO INCREASE LEAST MATERIAL CONDITION (L) AT BASE STRESS LOAD AREA AND REDUCE HRC MECHANICAL REQUIREMENTS.
9. STYLE B US PATENT 9,845,820. MANUFACTURING LICENSE REQUIRED, INQUIRE EMAIL License@InSpec100.com
10. THESE NUTS SHALL BE USED IN ACCORDANCE WITH THE LIMITATIONS OF NASM33588.
11. THESE NUTS SHALL BE SAMPLE LOT INSPECTED FOR DISCONTINUITIES, NASM25027, SECTION 4.5.4 TABLE LIMITS 7 IN ACCORDANCE WITH ASTM E1444.
12. FREE EVALUATION SAMPLES AVAILABLE UPON REQUEST, INQUIRE EMAIL MS21042B@InSpec100.com

NOTE: BOTH STYLE "A" AND "B" CONFORMS TO NASM21042, MS21042 AND NAS1291

THIN WALLED, HEX FLANGE NUT, SELF LOCKING

450° F ALLOY STEEL, LOW HEIGHT, LIGHT WEIGHT

MS21042 / NAS1291

STYLE B - US PATENT 9,845,820