

Aerotight®

THE ALL METAL SELF-LOCKING NUT



AEROTIGHT MANUFACTURING

VIBRATION RESISTANT FASTENERS FOR THE NEW MILLENNIUM

Aerotight®

THE ALL METAL SELF-LOCKING NUT

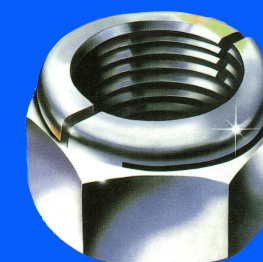
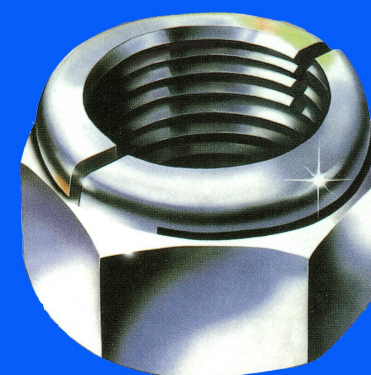
The Aerotight® product has built a reputation over many years for quality and reliability with a well proven design that has been established throughout industry, with applications such as these:

Industry

OEM
Food Processing
Water Processing
Automotive
Agriculture
Civil Engineering
Light/Heavy Engineering

Activity

Heavy Earth Moving Machines
Kitchen Appliances
Pumps etc.
High Performance Engines
Milking Equipment and Machinery
Road Working Equipment, Construction etc.
Conveyors, Actuators, Lifts, Railways etc.



Aerotight® is a *Registered* Trade Mark and can only be applied to goods manufactured by Aerotight Manufacturing. Any Company infringing the registered trade mark may be liable to legal proceedings.



The Aerotight® Nut is distributed through:

Apex Stainless Fasteners Limited



Unit 20 Somers Road Industrial Estate
Rugby Warwickshire CV22 7DH

Telephone: 01788 537979 Fax: 01788 547974 E-mail: sales@apexstainless.com
www.apexstainless.com

AEROTIGHT MANUFACTURING

2-4 Bradgate Street
Leicester LE4 0AW

Telephone: 0116 253 0133 Fax: 0116 253 0134 E-mail: sales@aerotight.com

Aerotight® offer the solution to your vibration problems

Key Advantages

Aerotight® is an all metal Stiff Nut - No vulnerable inserts to be affected by heat or oil.

Aerotight® can be re-used many times - Self locking function will still remain effective having been used a number of times.

Aerotight® will stay in position whether tightened down or not, provided the locking element is engaged - Does not have to achieve recommended torque to be effective.

Steel and Austenitic Stainless Steel **Aerotight®** can be used up to a temperature of 300°C.

Aerotight® can be supplied in all plated finishes if required.

Customised specials - Thin **Aerotight®** or other specified thicknesses may be supplied in suitable volumes or could encompass different specifications of material. Larger diameters are available on request.

No additional parts are required for **Aerotight®** to function, and therefore no special tools are needed for the application.

Thread Size Norm.	Pitch mm	A/F Max. mm	N. Dia. Max. mm	H. Max. mm	F. Min. mm
M 2.5	0.45	5.00	4.75	2.97	1.49
M 3	0.50	5.50	5.25	3.52	1.89
M 3.5	0.65	7.00	6.65	4.79	2.69
M 4	0.70	7.00	6.65	4.79	2.69
M 5	0.80	8.00	7.65	6.02	3.49
M 6	1.00	10.00	9.58	7.95	4.63
M 8	1.25	13.00	12.62	10.05	5.87
M 10	1.50	17.00	16.53	12.03	7.62
M 12	1.75	19.00	18.47	14.48	9.62
M 16	2.00	24.00	23.47	18.75	12.62
M 20	2.50	30.00	29.47	22.35	15.62
M 24	3.00	36.00	35.18	26.85	18.62

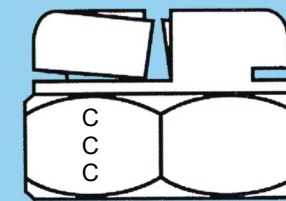
ISO Metric Threads to BS 3643 class 6H
Note: ISO Metric Aerotight® Nuts are normally available in one thickness.

Thread	Size	A/F Max.	Dia. N Max.	H Max. Ordinary	Thin	F Min. Ordinary	Thin
UNC/UNF Threads to BS 1580 Class 2B	No. 4	0.250	0.177	0.172	0.140	0.080	0.053
	No. 6	0.313	0.238	0.203	0.167	0.100	0.064
	No. 10	0.375	0.360	0.266	0.222	0.149	0.105
	1/4	0.438	0.425	0.312	0.245	0.175	0.108
	5/16	0.500	0.488	0.408	0.299	0.250	0.141
	3/8	0.563	0.550	0.459	0.355	0.287	0.183
	7/16	0.688	0.675	0.539	0.414	0.350	0.225
	1/2	0.750	0.738	0.621	0.475	0.412	0.266
	5/8	0.937	0.922	0.773	N/A	0.537	N/A
	3/4	1.125	1.110	0.934	N/A	0.662	N/A
BA Threads to BS 93	6	0.193	0.183	0.157	0.125	0.080	0.053
	4	0.248	0.238	0.203	0.162	0.110	0.069
	2	0.324	0.314	0.256	0.212	0.142	0.098
	0	0.413	0.403	0.328	0.272	0.188	0.132
BSW/BSF Threads to BS 84 Normal Class	3/16	0.324	0.314	0.256	0.212	0.142	0.098
	1/4	0.445	0.433	0.312	0.245	0.175	0.108
	5/16	0.525	0.513	0.383	0.299	0.225	0.141
	3/8	0.600	0.588	0.459	0.355	0.287	0.183
	1/2	0.820	0.808	0.621	0.475	0.412	0.266

Material Specifications Available

- Stainless Steel 303 and 316 (A4)
- Stainless Steel A4-80
- Mild Steel 230 M07 Non-Leaded BS970
- Zinc & Clear Trivalent or Zinc & Yellow Passivate
- Brass BS 2874 CZ121

Please Note:
All genuine 316 (A4) **Aerotight®** are marked with a unique identification on one flat of the hexagon (as shown)

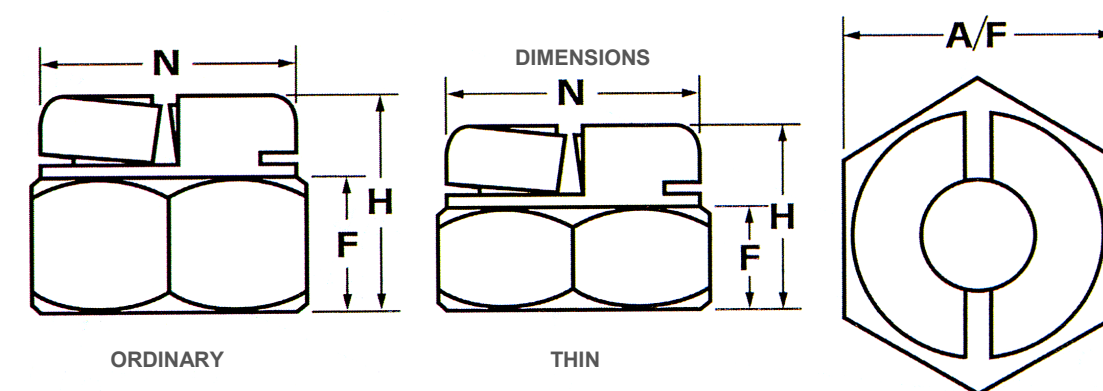


316 (A4) Stainless Steel

316 (A4) Stainless Steel has been developed for use in highly corrosive environments.

316 (A4) Stainless Steel **Aerotight®** can be safely used for outdoor applications in coastal and industrial areas where atmospheric corrosion is severe.

316 (A4) Stainless Steel **Aerotight®** is suitable for use in the chemical, photographic, food and horticultural industries.

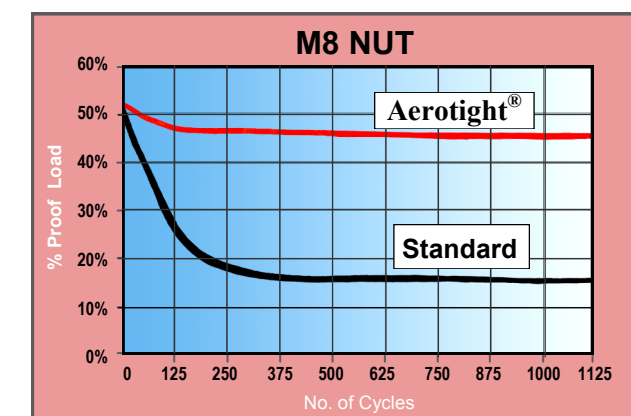
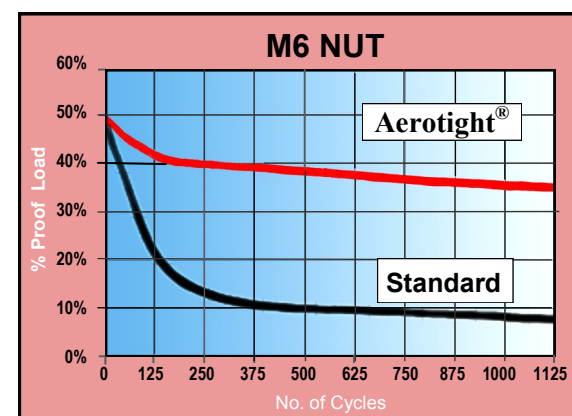


Recommended Practices

- When assembled on the screw, two full threads should protrude through the **Aerotight®** Nut.
- Aerotight®** Nuts should not be used on damaged or interrupted threads.

Vibration Test Comparison

Aerotight® Nut (A4 Stainless Steel) & Standard Nut (Grade 8)



Nut tested using Standard Grade 8.8 Bolt - Unlubricated. Accuracy of result: +/- 10%.
Test carried out on a Junker Vibration Test Machine with kind permission of Land Rover, Gaydon.