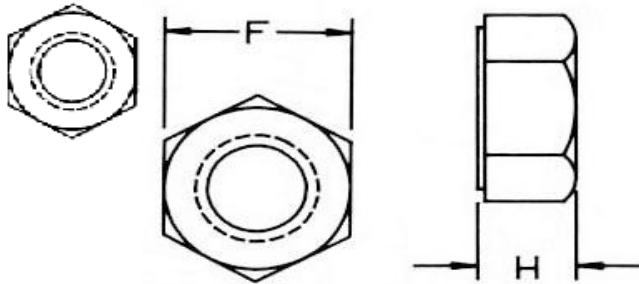


# Excitron All-threads and Nuts Data

Excitron provides excellent delrin (acetal) nuts and nylon 6/6 all-threads for linear motion applications. We can machine and mount the all-threads to your stepper motor using adhesives or C-clamp collars for a nominal fee. Our delrin nuts are easily mounted to your plate and brackertry.

This versatile threaded rod stock is easily cut to size, resistant to most chemicals, electrically insulating, non-magnetic, lightweight, low thermal conductivity, vibration, and abrasion resistant. Standard lengths are shown for pricing. We can furnish cut to your length, up to 8 feet, with a nominal cutting charge.



Small round shoulder ring is standard, we can machine it longer and add holes.

Hex Nut Thread Size	#1 Tensile lbs	#2 Tensile Torque	Max Torque before failure	Width F	Height Height
440	85	2 In. Lbs.	1.5 In. Lbs.	.250	.100
632	135	5.2 In. Lbs.	4 In. Lbs.	.305	.120
832	172	6.8 In. Lbs.	5 In. Lbs.	.335	.130
1024	211	7 In. Lbs.	5.5 In. Lbs.	.365	.135
1032	276	8 In. Lbs.	6.5 In. Lbs.	.365	.135
.25-20	311	19.3 In. Lbs.	17 In. Lbs.	.425	.235
.31-18	877	44.3 In. Lbs.	42 In. Lbs.	.500	.270
.38-16	994	74 In. Lbs.	72 In. Lbs.	.560	.330
.50-13	2,367	15.7 Ft. Lbs.	13 Ft. Lbs.	.750	.430
.62-11	3,487	31.7 Ft. Lbs.	30 Ft. Lbs.	.925	.550
.75-10	3,800	50 Ft. Lbs.	48 Ft. Lbs.	1.100	.640
.88-9	4,200	75 Ft. Lbs.	73 Ft. Lbs.	1.280	.750
1.00-8	4,800	100 Ft. Lbs.	98 Ft. Lbs.	1.470	.870

Test #1 Pull Test - Nylon Nut on Metal Screw    Test #2 Torque - Nylon Nut on Metal Screw

Threaded Rod SIZE	TENSILE TEST		MAX. TORQUE		DOUBLE SHEAR	
	ULTIMATE TORQUE	BEFORE DEFORMATION	Yield lbs	Break lbs	Yield lbs	Break lbs
.25-20	19 In. Lbs.	15-16 In. Lbs.	200	228	413	432
.31-16	37 In. Lbs.	32-34 In. Lbs.	400	424	866	880
.38-16	49 In. Lbs.	45-46 In. Lbs.	480	510	1100	1173
.50-13	11 Ft. Lbs.	7-8 Ft. Lbs.	1400	1425	2250	2300
.62-11	22 Ft. Lbs.	18-19 Ft. Lbs.	2200	2300	3300	3400
.75-10	30 Ft. Lbs.	26 Ft. Lbs.	3000	3100	4300	4400
.88-9	60 Ft. Lbs.	44 Ft. Lbs.	4200	4300	5400	5500
1.00-8	75 Ft. Lbs.	72 Ft. Lbs.	5300	5400	6400	6500

## Delrin and Nylon 6/6 Mechanical Properties (73° F / 23° C)

Tensile Strength	D638	12,000 psi.	82.7 MPa
Elongation	D638	60%	60%
Shear Strength	D732	9,600 psi.	66.2 MPa
Flexuaral Modulus	D790	410,000 psi.	2.,287 MPa
Impact Strength	D256	1.0 ft/lb/in	5.5 kg/cm <sup>2</sup>
Hardness	D785	R121	M79
Specific Gravity	D792	1.13	1.13
Melting Point	D789	500 F	260° C
Dielectric Strength	D149	600 v/mil	CM
UL Rating	BUL. 94	94V2	94V2