INTRODUCING: Helix® K-Style TAB Anti-Backlash Nut

HELIX™ LINEAR TECHNOLOGIES

Torsional Anti-Backlash (TAB) K-Style

- **High Stiffness**
- **Low Torque**
- **Low Friction**
- **Wear Compensating**
- **Full Size Range Ø 1/4" - 3/4" screws**

The Helix K-Style anti-backlash nut

This is the newest design in our series of zero backlash and wear compensating nuts. The Torsional Anti-Backlash (TAB) nut design offers high axial stiffness and extremely low drag torque. The nuts are rated for moderate to high dynamic and static load ratings.

Made from our Helix® proprietary self-lubricating polyacetal with Teflon® micro powder, this nut is available in a full range of leadscrew sizes from ¼" (6mm) to ¾" (20mm) diameters on an extensive list of leads from less than .039" (1mm) to greater than 2.00" (50mm). The leadscrews for these nuts are made from 300 series stainless or 4140 alloy steel with optional Teflon® coating finish for reduced friction, increased efficiency and longer nut life. This nut offers reduced components and ease of assembly with flanges and thread mounts interchangeable with the competition.

Custom mounting configurations are also available. The design has a shortened nut length to reduce the OAL or increase stroke length for a given leadscrew. Modifications can be made as required and this low torque/high axial stiffness design includes a unique machined version for applications that require a smaller nut size due to space limitations.

Nut Selection Guide

NUT STYLE	COST	LOAD	STIFFNESS	TORQUE
Axial Anti-backlash	low	medium	low	medium
Radial Anti-backlash	low	medium	medium	low
Torsional Anti-backlash	medium	high	high	very low

CALL TODAY FOR A QUICK & EASY QUOTE

www.helixlinear.com 1-855-HELIXLT

23200 Commerce Park Road Beachwood, OH 44122 USA email: sales@helixlinear.com 216-485-2232

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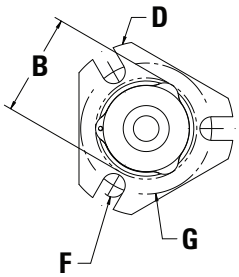
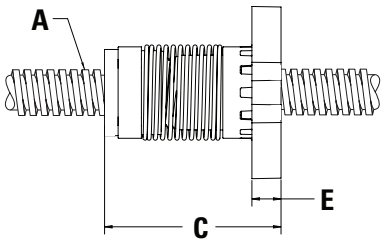
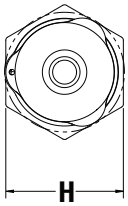
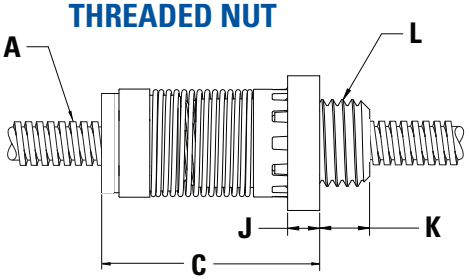


FLANGED NUT





THREADED NUT



FLANGED (inch)

Screw Ø (A) in.	Nut Ø (B) in.	Nut Length (C) in.	Flange Ø (D) in.	Flange Thickness (E) in.	Mounting Hole Ø (F) in.	Bolt Circle Ø (G) in.	Dynamic Load (lbs.) in.	Max. Drag Torque (OZ-IN)
.250	.70	1.6	1.12	.18	.144	.875	20	3
.312	.87	1.8	1.50	.25	.203	1.125	30	3
.375	.87	1.8	1.50	.25	.203	1.125	30	3
.437	1.06	2.1	1.75	.25	.220	1.406	50	6
.500	1.06	2.1	1.75	.25	.220	1.406	75	6
.562	1.30	2.5	1.75	.31	.220	1.750	90	6
.625	1.30	2.5	1.75	.31	.220	1.750	150	6
.750	1.63	2.8	2.38	.31	.220	2.000	250	7

THREADED (inch)

Screw Ø (A) in.	Nut Ø (B) in.	Nut Length (C) in.	Hex Across Flats Ø (H) in.	Hex Thickness (J) in.	Thread Length Ø (K) in.	Thread Size Ø (L) in.	Dynamic Load (lbs.) in.	Max. Drag Torque (OZ-IN)
.250	.70	1.6	.69	.18	.25	9/16-18	20	3
.312	.87	1.8	.88	.25	.37	3/4-20	30	3
.375	.87	1.8	.88	.25	.37	3/4-20	30	3
.437	1.06	2.1	1.00	.25	.37	15/16-16	50	6
.500	1.06	2.1	1.00	.25	.37	1 1/8-16	75	6
.562	1.30	2.5	1.25	.31	.37	1 1/8-16	90	6
.625	1.30	2.5	1.25	.31	.37	1 1/8-16	150	6
.750	1.63	2.8	1.56	.32	.37	1 3/8-16	250	7

FLANGED (metric)

Screw Ø (A) mm	Nut Ø (B) mm	Nut Length (C) mm	Flange Ø (D) mm	Flange Thickness (E) mm	Mounting Hole Ø (F) mm	Bolt Circle (G) mm	Dynamic Load (kg.)	Max. Drag Torque (N-m)
6	17.8	40.6	28.6	4.8	3.7	22.2	9	.025
8	22.1	45.7	38.1	6.4	5.2	28.6	13	.025
10	22.1	45.7	38.1	6.4	5.2	28.6	13	.025
12	26.9	53.3	44.5	6.4	5.6	35.7	34	.040
14	33.0	63.5	44.5	8.0	5.6	44.5	41	.040
16	33.0	63.5	44.5	8.0	5.6	44.5	68	.040
18	41.4	71.1	60.5	8.0	5.6	50.8	113	.040
20	41.4	71.1	60	8.0	5.6	50.8	113	.050

THREADED (metric)

Screw Ø (A) mm	Nut Ø (B) mm	Nut Length (C) mm	Hex Across Flats (H) mm	Hex Thickness (J) mm	Thread Length (K) mm	Thread Size (L) mm	Dynamic Load (kg.)	Max. Drag Torque (N-m)
6	17.8	40.6	17.5	4.8	6.4	9/16-18	9	.025
8	22.1	45.7	22.4	6.4	9.5	3/4-20	13	.025
10	22.1	45.7	22.4	6.4	9.5	3/4-20	13	.025
12	26.9	53.3	25.4	6.4	9.5	15/16-16	34	.040
14	33.0	63.5	31.8	8.0	9.5	1 1/8-16	41	.040
16	33.0	63.5	31.8	8.0	9.5	1 1/8-16	68	.040
18	41.4	71.1	39.6	8.0	9.5	1 3/8-16	113	.040
20	41.4	71.1	39.6	8.0	9.5	1 3/8-16	113	.050

Additional materials are available for higher loads and special applications.

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