

EJOT TORQtec® Spindle-Nut-Systems

Completely cold-formed threaded spindles, combined with accurately fitting nuts (preferably made of plastic) with very tight-fitting thread pairs characterise the EJOT® spindle-nut-systems.

A computer-assisted gear design is the technical basis for the development of the components.

Due to the fact that development and production of the spindle-nut-systems are done by one supplier, pairings with almost ideal thread pair clearance are produced. Adjustment problems between the spindle and the spindle nut can thus be eliminated to the greatest possible extent.

The EJOT® precision motion thread is the basis for these spindle-nut-systems. For the production of spindles made of through-hardened steel or stainless steel A2 with a standard motion thread, EJOT uses well-tested tools.





Advantages of the TORQtec® systems

- "From the idea to the concept"
- Short development times for new projects
- Usage of well-proven standardised components
- Development and production of components from one supplier
- Quick provision of sample parts

Characteristics at a glance

- Customer-specific solutions
- High precision and repeat accuracy
- Low notch sensitivity due to cold-forming process
- Threaded spindle with EJOT® standard precision motion thread
- Increase in strength due to strain hardening in the thread
- Defined clearance between spindle and spindle nut
- Multi-start thread pitch possible



EJOT® precision motion threads

		STG 3	STG 3.7	STG 4	STG 4	STG 4.5	STG 5.92	STG 6	STG 6	STG 6	STG 6.35
External thread Ø	d _a [mm]	3	3.7	4.0	4.0	4.5	5.9	6.0	6.0	6.0	6.35
Thread core Ø	d _k [mm]	2.3	2.4	2.9	2.9	3.2	4.6	4.3	4.6	4.3	4.5
Pitch	p [mm]	0.5	1	1.0	2.0	1.7	1.0	1.5	7.9	3.0	1.5
Flank angle		30°	20°	30°	45°	40°	30°	30°	40°	48°	30°
Number of turns		1	1	1	2	1	1	1	5	2	1
max. thread length	l [mm]	7	24			53	42		55		130

		STG 7	STG 8	STG 8	STG 9.3	STG 10	STG 10	STG 10
External thread Ø	d _a [mm]	6.89	8.0	8.0	9.3	10.0	10.0	10.0
Thread core Ø	d _k [mm]	5.4	5.7	5.7	5.6	7.2	7.2	8.2
Pitch	p [mm]	6	2.0	4.0	6.6	2.5	5.0	1.5
Flank angle		55°	30°	45°	36	30°	45°	20°
Number of turns		3	1	2	2	1	2	1
max. thread length	l [mm]	65			26			100

Application areas

Longitudinal adjustment drives:

- Electric steering column adjustment
- Electric door closing devices
- Electric parking locks

Materials

Spindle:

- Through-hardened steel
- Stainless steel A2

Spindle nut/injection molding:

Thermoplastic materials



