

Design features

Eichenberger high-helix leadscrews are called Speedy for good reason: never before have such high moving speeds been obtained at such low rotational speeds. The Eichenberger Speedy has made this possible by using a helix pitch unheard of before.

High-helix leadscrews are made of corrosion-protected steel and are formed by the cold-rolling process. They are coupled with high wearresistant technopolymer flange nuts in non-preloaded or preloaded designs.

For higher loads or special applications, alternative technopolymer materials or bronze may be used to make the nuts.

Materials

Screw

- standard: corrosion-protected steel 1.4021 (X20Cr13)
- on request: other materials such as corrosion and acid resistant steel 1.4404 (X2CrNiMo17-12-2) aluminium
- on request: coating to reduce sliding friction

- on request: other materials such as iglidur® J *

* iglidur® is a registered trademark of igus® GmbH

Operational temperatures

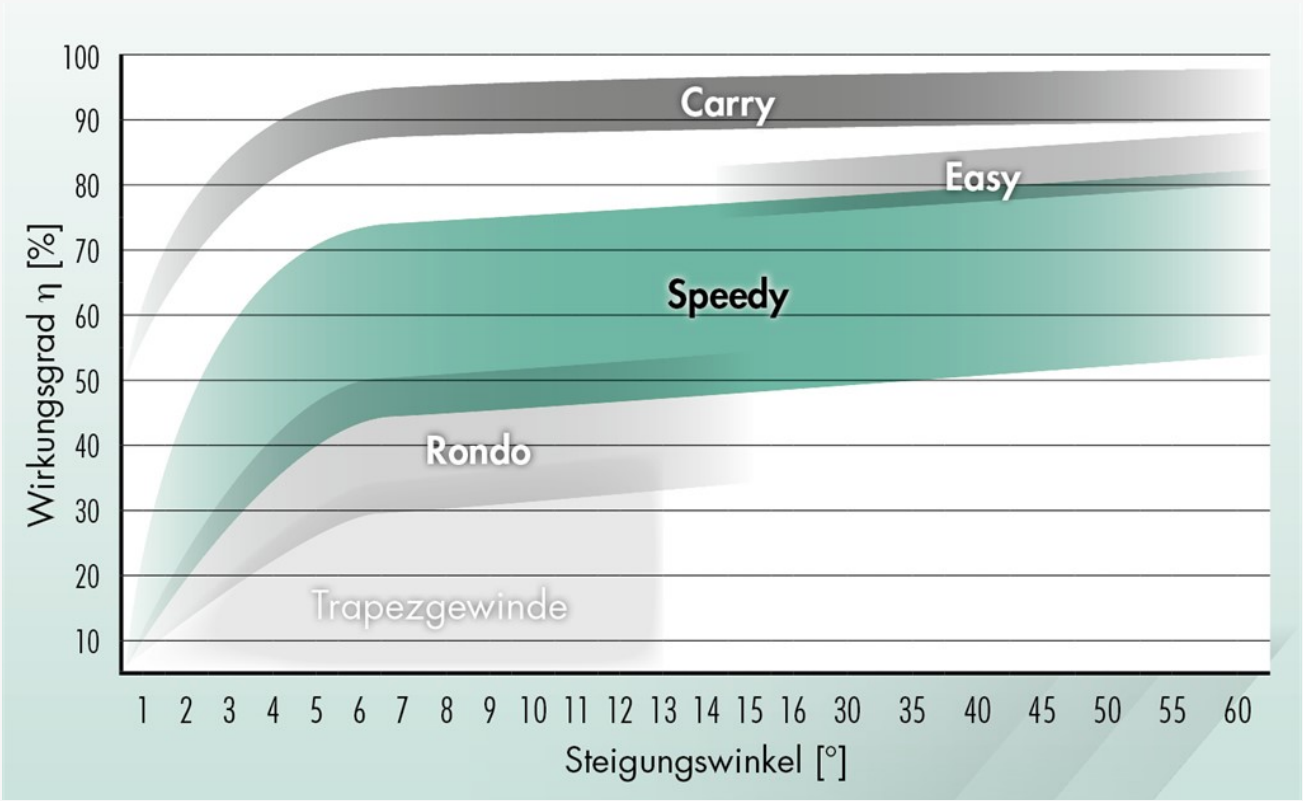
- POM-C / EX100 –40 to +60 °C
- iglidur® J –50 to +90 °C
- bronze –40 to +200 °C

Nut

- non-preloaded: POM-C black bronze 2.1052 (CuSn12)
- preloaded: axial-preloaded (if $p_0 < d_0$): POM-C black torsion-preloaded (if $p_0 \geq d_0$): EX100 white bronze on request

Lead accuracy

- standard: $G9 \leq 0,1 \text{ mm}/300 \text{ mm}$ (in accordance with DIN 69051)
- on request: other lead accuracies



Efficiency

The efficiency η depends on the helix angle and reaches values from $\sim 0,5$ to $0,75$.

Production / Handling / Lubrication

Production lengths

In general, Eichenberger screws are produced as bars with a length of 3 m. Depending on the diameter and the material availability, lengths up to 6 m are also possible on request.

Any kind of end machining

By default leadscrews are cut to the desired length without Special machining.

Upon request, a so-called standard screw end journal with three turned bearing seats is available. Dimensions are as per customer specifications. Also see the links to the CAD data at www.gewinde.ch

Our speciality is any application-specific end machining: Tell us your requirements, and we'll provide YOUR tailor-made screw! In each instance, a detailed drawing would be necessary.

Handling

Speedy, Easy and Rondo leadscrews are precision parts and must be protected from shock, dirt or moisture when transported or stored. Please do not unpack until ready for use.

Please check for cleanness when mounting a leadscrew. Dirt or foreign matter on the thread may cause increased wear and premature failure.

Please consult lubrication recommendation before mounting or operating leadscrews.

Radial loads and torque

Radial loads or torque brought to bear upon the nut result in overload of individual contact surfaces, thus seriously affecting the service life of the leadscrew assembly. Therefore it is important to properly mount the screw and to comply with all relevant form and positional tolerances.

Lubrication

In some cases, a single lubrication with grease or oil is sufficient. However, any lubrication cycle depends on the application environment.

Bronze nuts have to be lubricated regularly.

Recommended all-purpose lubricant:

Klüber Microlube GBU Y 131

Surface coatings

... possible on request:

- generally to reduce sliding friction
- if lubrication is not possible (e.g. in the food industry)