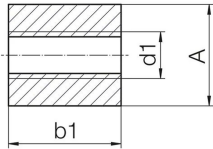


dryspin® injection moulded lead screw nuts,
cylindrical, thread cut, DST-JSLM

DST-JSLM-C-01-DS10X2



dryspin® injection moulded lead screw nuts,
cylindrical, thread cut, DST-JSLM

- Material: iglidur® J
- Thread direction: Left-hand thread
- Thread type: High helix thread dryspin®
- Design: Standard
- Cylindrical lead screw nut

Product description

Introducing the dryspin injection moulded lead screw nut, cylindrical, thread cut, DST-JSLM by igus. Crafted from high-performance iglidur J polymer, this nut offers exceptional efficiency at all speeds. Enjoy low wear rates thanks to its low coefficient of friction, and benefit from its durability in temperatures up to +90°C. This lubrication-free and maintenance-free solution is robust, chemical resistant, and designed for quiet, vibration-free operation. Perfect for a variety of applications, it's the reliable choice for your lead screw technology needs.

Requirements

Mould-resistant according to DIN EN ISO 846 Procedure A	Yes
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General properties

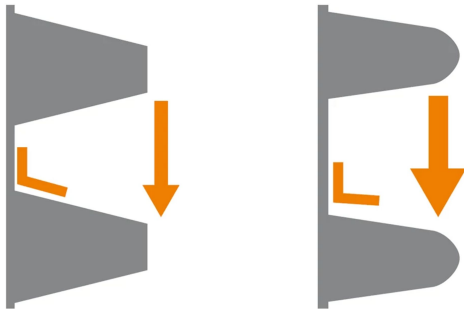
Thread direction	Left-hand thread
Thread type	Metric thread; standard for highest compatibility
Weight	12.092 g
With spanner flat	No

Dimensions

Thread size	DS10X2
Ø d1	10 mm
Ø d2	20 mm
b1	20 mm
Effective supporting surface	301.4 mm²



Additional information and diagrams

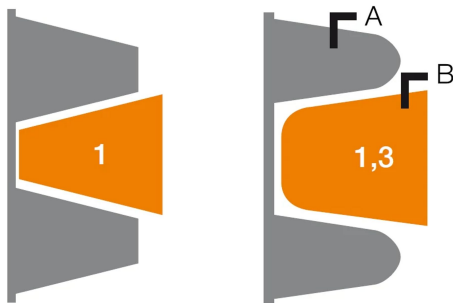


Higher efficiency due to optimised thread angle

Due to a flatter thread angle in dryspin® high helix lead screws (similar to a trapezoidal thread), the applied force is efficiently converted into a translational motion. Compared with a steeper thread angle, this means a lower power loss.

Left: Steep flank angle, standard geometry

Right: Flat flank angle, dryspin® geometry

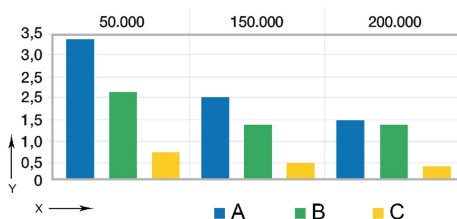


Extended service life due to asymmetry

Due to the larger distances between the individual dryspin® thread turns, the thread ideally matches the properties of the lubrication-free igus® high performance polymers. The proportion of the tribologically optimised polymer in the thread turns can be extended by a factor of 1.3 for all sizes. More wear resistant material and higher levels of efficiency are crucial for up to 5 times longer service life of standard geometries. The larger the lead screw diameter, the stronger the impact of this effect. Backlash can be minimised life-long by the use of dryspin® zero-backlash threaded nuts with integrated spring pretension.

Left: Symmetrical standard geometry

Right: Asymmetrical dryspin® geometry



Wear test high helix thread

Wear-resistant high helix thread 10x50, dryspin® high helix thread / Standard high helix thread, load 36 N, 100 rpm for 50,000/150,000/200,000 cycles

drylin® lead screw nuts are made from tribologically optimised materials. Starting in the development phase, the focus is on optimising the friction properties of the drylin® lead screw units, with the objective of attaining the lowest possible wear rates and friction values.

A Blue: Standard high helix thread/POM plastic nuts

B Green: Standard high helix thread/lead screw nut igus®

C Yellow: dryspin® high helix thread/lead screw nut igus®

y = Wear rate [μm/km stroke]