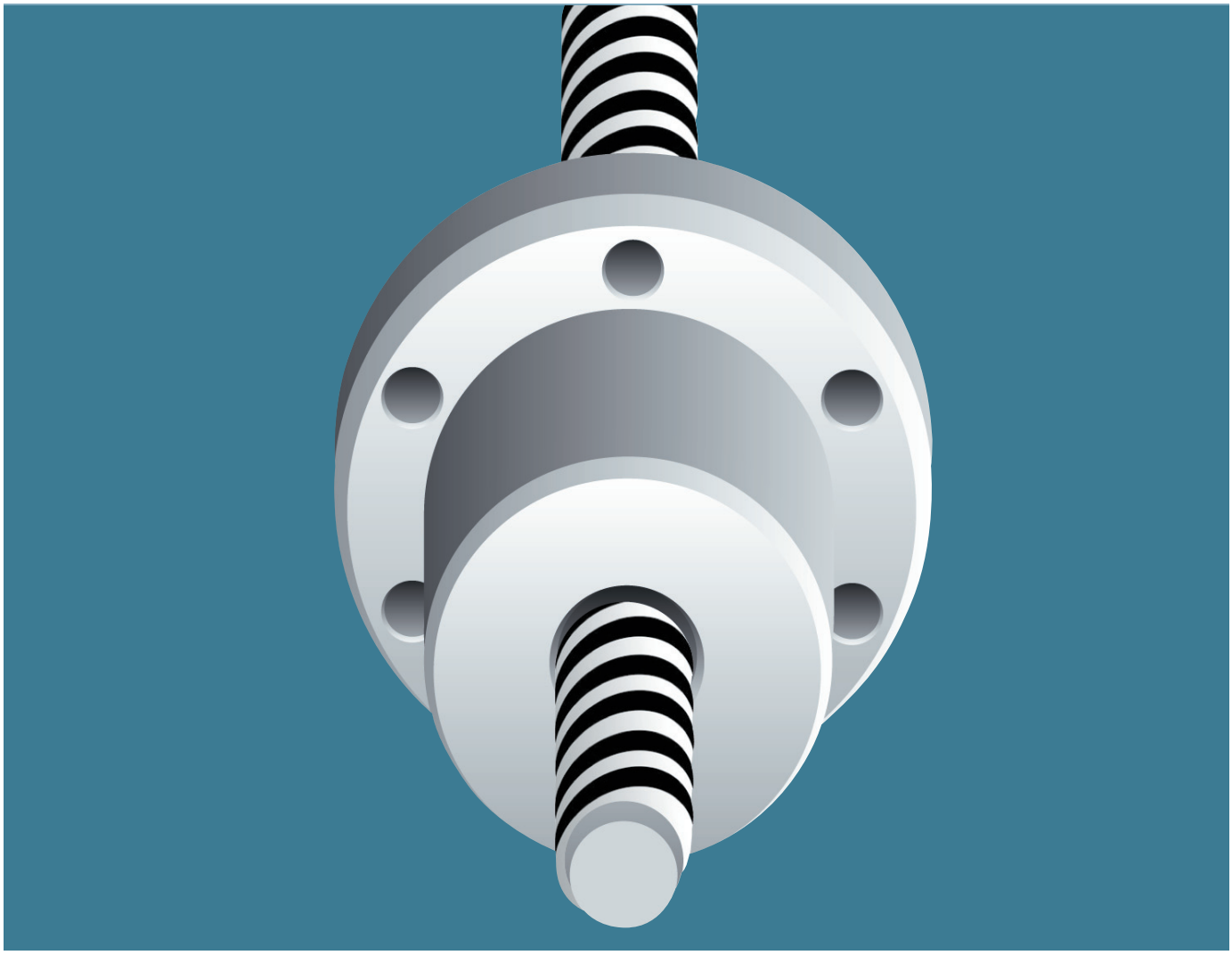
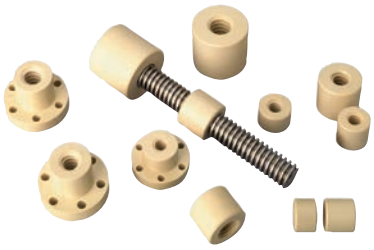


drylin® Lead Screw Drives



- Maintenance-free, dry operation
- High efficiency
- Low noise
- Insensitive to dirt and dust
- Corrosion-free
- Trapezoidal thread and high helix thread
- Anti-backlash function available
- FDA approval options

drylin® Lead Screw Drives

Lead screw drives are machine components that convert a rotary motion into a linear motion. drylin® lead screw drives are always based on self-lubricating plastic nuts and thus enable a life-long operation without external lubrication.

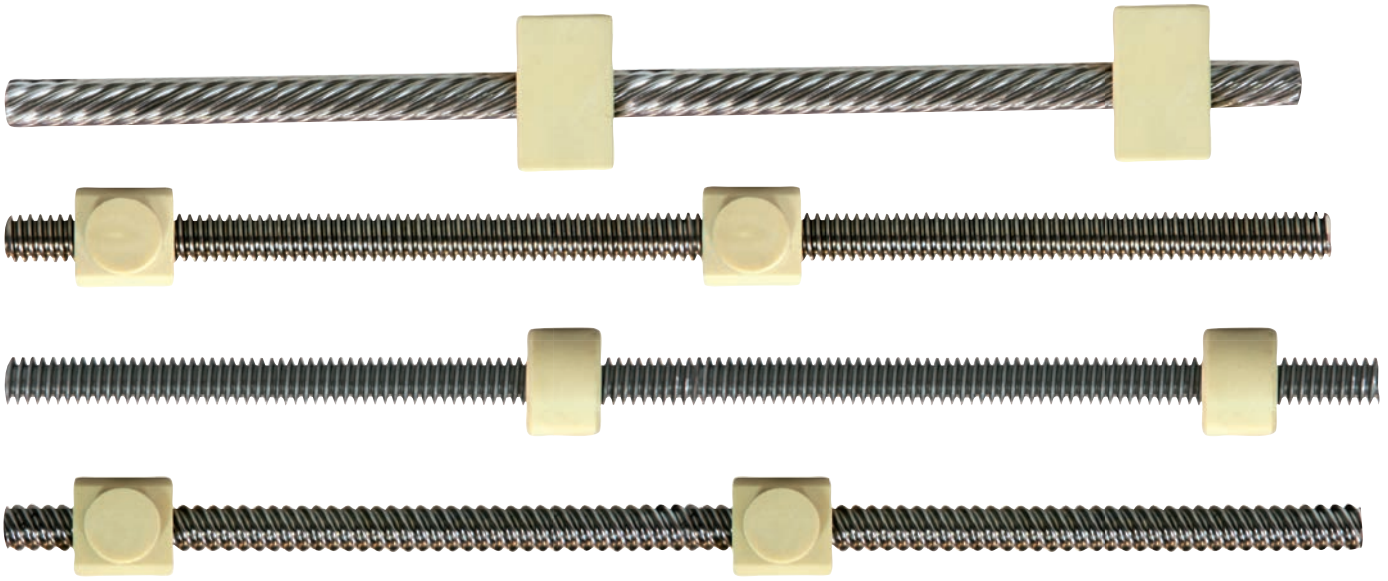
The lead screw (trapezoidal or high-helix thread) remains dry, therefore providing many technical benefits. For instance, dirt cannot adhere to the lubricants. On the one hand, this means that drylin® lead screw drives are extremely insensitive to dirt, and on the other, can be used in hygienic applications. Various lead screws cover a broad range of applications. Classic format adjustments and lifting applications can be implemented with the self-locking trapezoidal thread. Quick adjustments or handling utilize the high ratio of the high helix thread. All lead screws are available in steel or stainless steel and provide a corrosion-free solution in combination with drylin® lead screw nuts made from iglidur® plastics.

Benefits:

- Maintenance-free, dry operation, enabling use in very clean environments
- Low noise
- High insensitivity to dust and dirt
- Corrosion-free
- Low weight
- Low coefficient of friction in dry operation
- Clearance-free with optional anti-backlash function
- Vibration damping

When not to use it?

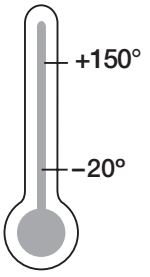
- For positioning accuracy below 10 µm
- In dynamic high load applications
- When an efficiency greater than 80 % is required



No lubrication required

Free of toxins ROHS 2002/95/EC

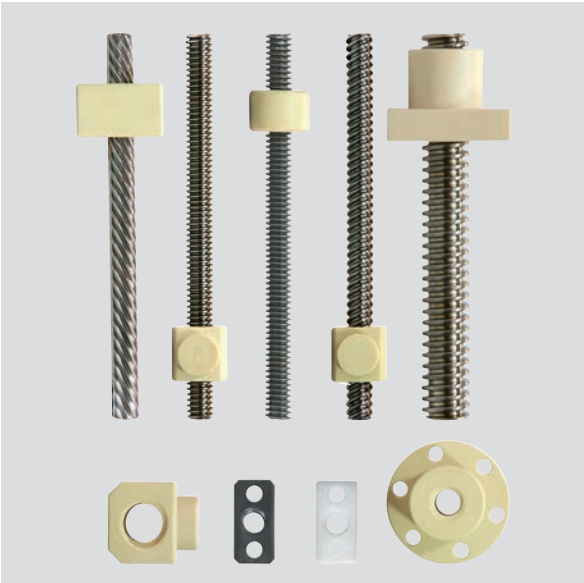
Temperature



Product range

48 dimensions with 7 nut versions in 10 different materials

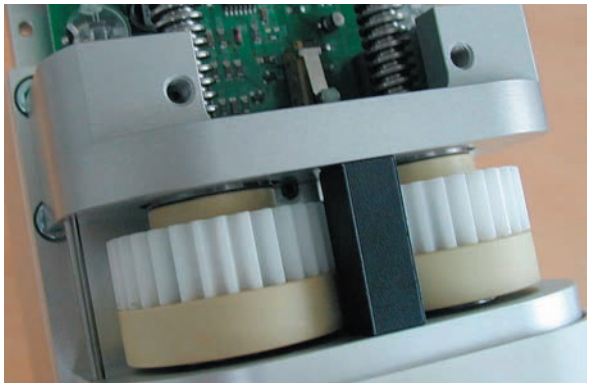
drylin® Lead Screw Drives | Application Examples



Typical industrial sectors and application areas

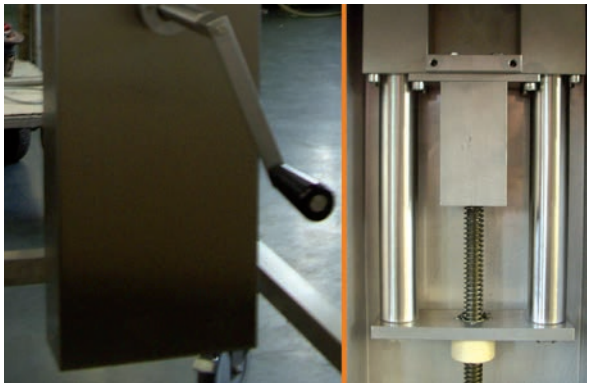
● Format adjustments ● Drive technology ● Lab and medical technology ● Fitness and rehabilitation equipment ● Optical equipment ● Furniture industry ● Automotive industry ● Traffic engineering ● Solar technology ● Safety engineering ● Printing industry ● Sewage technology ● Valve technology, etc.

Improve technology and reduce costs - 170 other exciting applications can be foand online
▶ www.igus.co.uk/en/drylinApplications

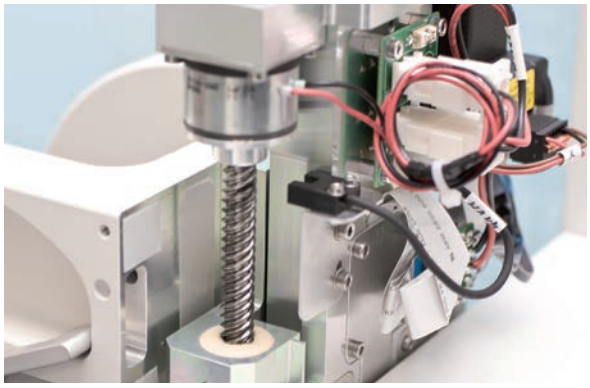


Two-component mixing unit

Laser marking unit

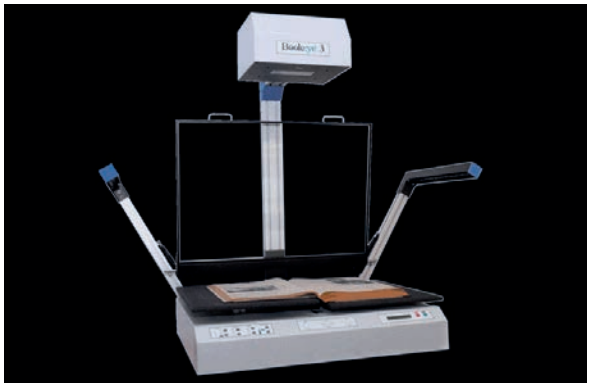


Can opener: drive for the height adjustment



Lab equipment for liquid handling

Lead screw nut in block valve



Book scanning

drylin® Lead Screw Drives | Technical Data

drylin® lead screw drives run without maintenance or lubrication on different lead screw materials, because the nuts are made from iglidur® high-performance tribo-polymers. These lead screw nuts, compared to the nuts requiring maintenance and lubrication, offer substantial advantages, especially in application areas in the packaging technology (cleaning) and applications involving high dust and dirt expsoure (textile, quarry, and wood processing machines) and applications that are cleaned (packaging and food processing machines).

Radial forces

drylin® lead screw nuts are designed to absorb axial forces. Any radial forces that may occur in the application should be absorbed by additional linear guides. ▶ drylin® linear guides, starting from **page 779**

Temperature

drylin® lead screw nuts, which are manufactured from maintenance-free iglidur® materials, are principally suited for use in temperatures ranging from –20 °C to +90 °C (150 °C, depending on material). Please note that the temperature also has an effect on the clearance of the nut, as well as the maximum load capacity. When the application is exposed to particularly low or high temperatures, we recommend testing the suitability of the lead screw nuts in this specific case by a practical test. In order to provide for the use in all temperature ranges, we have lead screw nuts available in various clearance classes.

Wet applications

Trapezoidal lead screw nuts from iglidur® J or iglidur® A180 must be used for applications in humid environments, especially for wet applications. These materials are characterized by very low moisture absorption.
▶ iglidur® J, **page 93** and ▶ iglidur® A180, **page 395**

Dirt

By the use of maintenance-free iglidur® materials for lead screw nut production, drylin® lead screw drives feature completely dry-running operation. By deliberately avoiding lubricants, the adhesion of soft particles, such as dust and fibers is notably reduced. When compared to conventional, lubricated materials, it is common to see significant improvements in the service life in contaminated environments. However, in environments with significant contamination and hard particles, such as metal chips or granite dust, the lead screw should be covered.

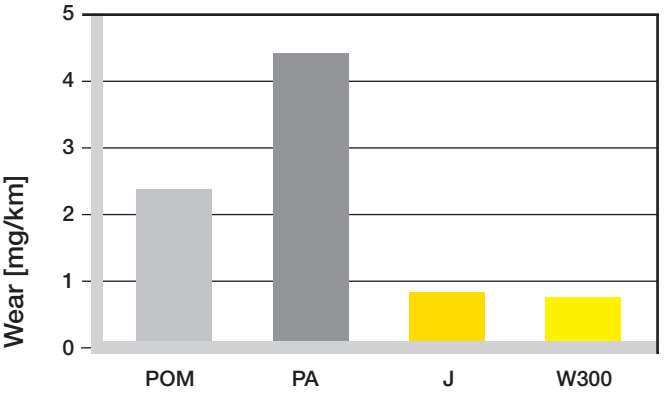


Diagram 01: Wear test on a rolled trapezoidal thread leadscrew

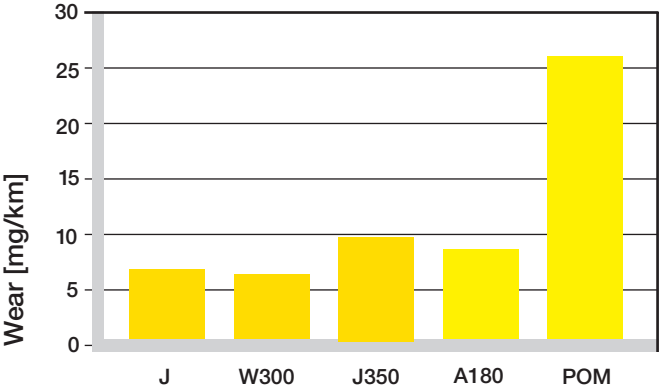


Diagram 02: Wear test on a C15 lead screw [mg/km] stroke 140 mm, 50 N, lead screw C15 rolled, 450 rpm

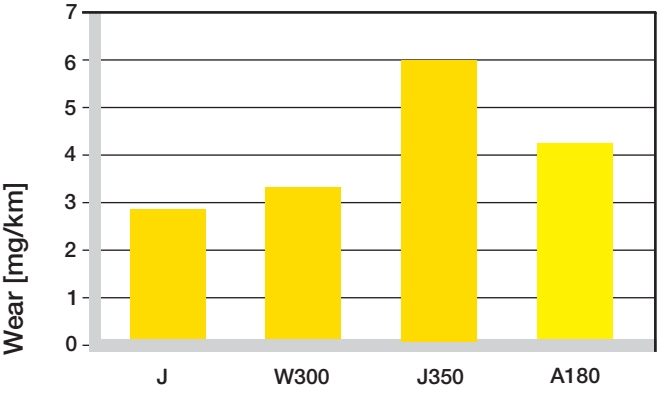


Diagram 03: Wear test on a VA lead screw [mg/km] stroke 140 mm, 50 N, lead screw C15 rolled, 450 rpm

Noise

Noise can generally occur with the use of lead screw drives. In particular, long lead screws and long travel distances can cause self-induced vibrations in the systems. Due to their good gliding characteristics, lead screw nuts from the tribologically optimized iglidur® materials tend to develop less noise than conventional plastics or metallic materials, such as bronze or brass. If your gliding screw drive develops noise, please contact us to discuss this with our experts
▶ Anti-backlash nut, **page 970**.

drylin® Lead Screw Drives | Technical Data

Lead screw drive inspection

drylin® lead screw drives are manufactured in accordance with DIN 103. Inspection is performed with standard thread plug gauges after production. The DIN 103 standard is converted to the corresponding size for any thread sizes that are not shown in the standard table. The hygroscopic and thermal properties of the material must be taken into account during selection. Dimensional changes can occur as a result of moisture and/or thermal exposure at the point of use. For these reasons, general DIN-compatibility cannot be guaranteed.

Clearance

The reliable operation of lead screw drives requires a basic amount of clearance. Application specific parameters must be observed in addition to the screw drive clearance caused by manufacturing tolerances. In addition to thermal and hygroscopic environmental influences, the minimum clearance to be accounted for in the application must also take into account the friction heat generated by the application. The use of gliding lead screw drives is therefore not recommended for precision drives without conducting practical tests. In practice, pre-tensioning has proven to be an effective counter-measure for undesirable clearance. In addition to the solutions from our standard product range, our technical support team will be pleased to discuss other options.

Efficiency

Efficiency is the ratio between the output and input power rating. drylin® lead screw nuts are characterized by low friction values, resulting in high efficiencies. Single start trapezoidal lead screw nuts achieve efficiencies between 20 and 48% under dry running conditions. High helix lead screw nuts achieve efficiencies between 50 and 80% under dry running conditions. Even though drylin® lead screw nuts were developed for completely dry running conditions, lubrication can help to additionally increase efficiency.

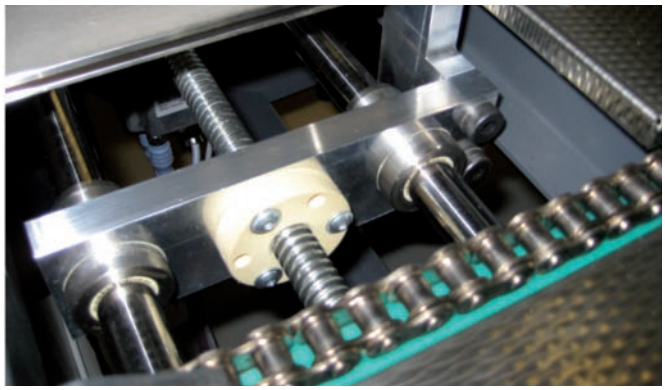
Self locking

Single start trapezoidal lead screw drives are self-locking. This means that the flank angle and the sliding friction prevent movement of the nut or the lead screw without the application of outside forces. As soon as the static friction is exceeded, the components are no longer self-locking. Multi-start trapezoidal screw drives have a “residual self-locking” feature; high helix screw drives have no self-locking feature.

Anti-backlash lead screw nuts

Backlash is the phenomenon created in the screw drives by the axial clearance. By applying radial pre-tensioning with the help of spring-loaded elastomers, vibrations and self-induced vibrations (frequently the cause for noise, especially with long lead screws and high RPMs) are significantly reduced.

Anti-backlash lead screw nuts in a glue application system of a seam gluing machine (wood industry). These ensure the utmost precision for this clearance-free adjustment drive.



Format adjustment in the paper industry with anti-backlash lead screw nut

Zero-backlash lead screw nuts

The zero backlash principle provides for minimal backlash for the life of the product. Ideal for precise positioning and feed movements in medical, laboratory and printing systems and other life-science fields. High helix nuts without zero-backlash feature or trapezoidal thread should be used for high loads, dirt accumulation or extreme external influences.

drylin® Lead Screw Drives | Technical Data

Lead screw nut assembly

drylin® lead screw nuts must be secured against twisting and sag.

Flanged lead screw nuts

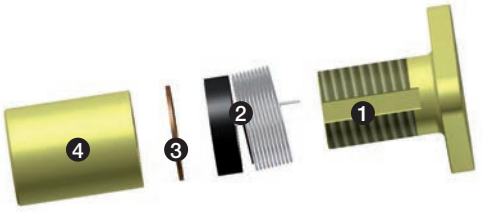
The maximum tightening torque for the assembly of flanged lead screw nuts is 2.5 Nm. We recommend that assembly screws are secured with a third medium (e.g liquid screw lock). Metallic ferrules should be used for even higher tightening torques.

Cylindrical lead screw nuts

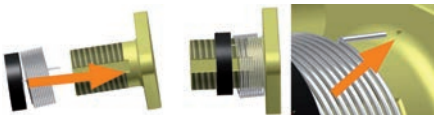
The outer diameter of cylindrical lead screw nuts is not designed for a press fit. We therefore recommend the use of a form fit as a locking feature, for instance by installing keyways. In practice, a screw mount has proven to be effective with low forces. Gluing lead screws nuts is not recommended. However, iif the leadscrew nuts must be glued into place, suitable tests need to be performed under any circumstances.

Assembly of zero backlash lead screw nuts

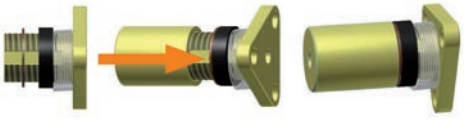
❶ Nut ❷ Adjusting ring with torsion spring
❸ Friction disc ❹ Counternut



Screw the adjusting ring with the spring ❷ approx. half-way onto the nut ❶ and fix the ends of the spring in the corresponding holes.

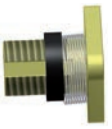


Continue to screw the adjusting ring onto the nut until the end to tension the torsion spring.



Slide the friction disc ❸ and the counternut ❹ over the adjusting ring. Please ensure that the adjusting ring does not rotate.

Press nut ❶ and counternut ❹ against each other and screw in the lead screw. Make sure that the adjusting ring maintains its preloaded position.



The adjusting ring can now be released. The nut will now assume a preloaded position on the lead screw.

Lead Screw selection

The suitability and the operating behavior of the system largely depend on the lead screws used with the nut. We recommend purchasing the nut and lead screw as a system from a single source. Lead screws are inspected with DIN 103 compliant gauges. In principle, drylin® lead screw nuts can be used with lead screws made from steel, stainless steel or hard-anodized aluminum. “Split” lead screws (right and left-handed threads on one lead screw) are available in addition to right-handed and left-handed versions.

Custom lead screws

Take advantage of our machining service - we manufacture ready to fit lead screws based on your needs. Please send us your drawing. We will submit an quotation to you in a short time.

Custom lead screw example

drylin® Lead Screw Drives | Technical Data

Custom nuts

Take advantage of our machining service - we manufacture lead screws nuts to suit your application. Please send us your drawing, we will quickly respond with a quotation.

Custom nut examples

Material selection

Standard drylin® lead screw nuts are offered in 4 materials:

iglidur® J: This material has the best friction values with the most leadscrew materials and low moisture absorption.
▶ iglidur® J, **page 93**.

iglidur® W300: This material features high static strength
▶ iglidur® W300, **page 135**.

iglidur® A180: This material meets the requirements of the FOOD AND DRUG ADMINISTRATION (FDA) and can therefore be used in direct contact with foods and pharmaceuticals. Please note that lead screw nuts from this material are made to order. ▶ iglidur® A180, **page 395**.

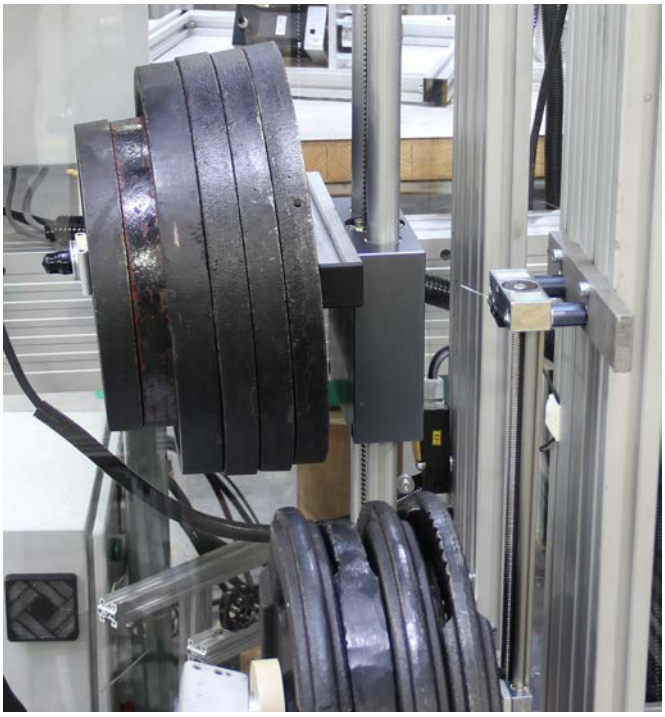
iglidur® J350: This material features high resistance to temperatures. Lead screw nuts from iglidur J350 can be used up to 150 degrees. Please note that lead screw nuts from this material are made to order.
▶ iglidur® J350, **page 241**.

iglidur®-Material	Surface pressure
iglidur® J	4 MPa
iglidur® W300	5 MPa
iglidur® A180	3.5 MPa
iglidur® J350	2 MPa

Table 01: Permitted continuous surface pressure in the threads

Service life time

drylin® lead screw nuts are made from tribologically optimized materials. Already during the development phase, the focus is on optimizing the friction properties of the drylin® lead screw drives, with the objective of attaining the lowest possible wear rates and good friction values. In order to make the most precise statements about service life and wear resistance, several hundred tests are conducted each year on the test stands at the igus® test lab in Cologne. Our experts will gladly test your application as well.



Test rig at the igus® lab to determine service life

Trapezoidal thread calculation

The load capacity of trapezoidal lead screw nuts made from high-performance polymers is dependent on the surface pressure, the surface speed and the resultant temperature. The temperature behavior is additionally influenced by the duty cycle, the lead screw length, as well as the selected lead screw material and its specific heat conductivity.

iglidur®-Material	rotating long-term
iglidur® J	1.5
iglidur® W300	1.0
iglidur® A180	0.8
iglidur® J350	1.3

Table 02: iglidur® materials gliding speeds in m/s

F_{axial}	Axial force
p_{real}	Actually occurring surface pressure for selected installation size, dependent on material ▶ **Table 01, page 953**
$P_{zul.}$	max. permitted surface pressure
$A_{e\ real}$	Percentage of surface contact area of the selected trapezoidal lead screw nut
p	Lead
pv-Value	p_{real} x v
d1	Diameter
M_{ta}	Drive torque [Nm] when converting a rotating motion into a linear motion
M_{te}	Drive torque [Nm] when converting a linear motion into a rotating motion
v	Surface speeds [m/s]
s	Feed [m/s]
n	RPM [min^{-1}]
η	Efficiency

Diagram 04: Key for the formula chart

Required percentage of surface contact area:

$$A_e = \frac{F_{axial}}{p_{zul.}} \quad [mm^2]$$

Selection of the required thread size and determination of the actual surface pressure:

$$p_{real} = \frac{F_{axial}}{A_{e\ real}} \quad [MPa]$$

pv-Value:

$$pv = p_{real} \cdot v$$

Surface speeds:

$$v = \frac{n \cdot d1 \cdot \pi}{60{,}000} \quad [m/s]$$

RPMs:

$$n = \frac{v \cdot 1{,}000 \cdot 60}{\pi \cdot d1} \quad [1/min]$$

Feed rate:

$$s = \frac{n \cdot p}{60{,}000} \quad [m/s]$$

Drive torque:

$$M_{ta} = \frac{F_{axial} \cdot p}{2{,}000 \cdot \pi \cdot \eta}$$

$$M_{te} = \frac{F_{axial} \cdot p \cdot \eta}{2{,}000 \cdot \pi}$$

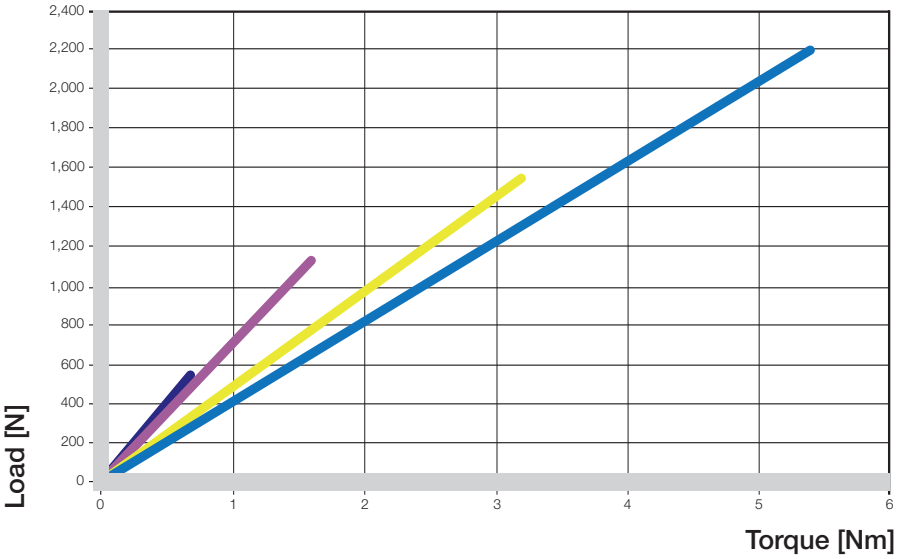
Diagram 05: Formula chart - lead screw drives

My Sketches

drylin® Lead Screw Drives | Technical Data

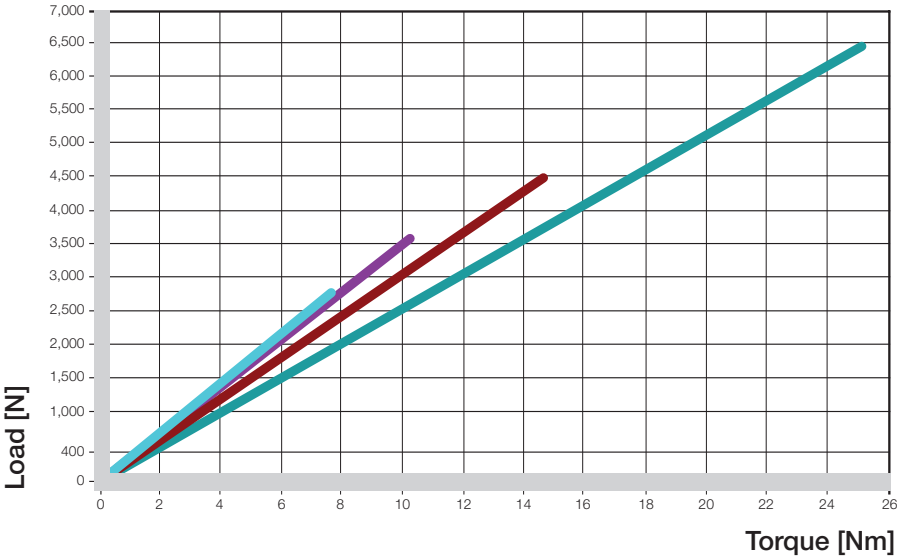
Required drive torque

The required drive torque of the lead screw nut is determined by the axial load, the pitch of the lead screw, the sliding coefficient of the lead screw drives and the lead screw supports. At high speeds, the acceleration torque must also be taken into account; depending on the installation geometry, increased break away torque may also occur. Dirt, dust and the surface and/or leadscrew condition can additionally increase drive torque. Lubrication can temporarily reduce the required drive forces.



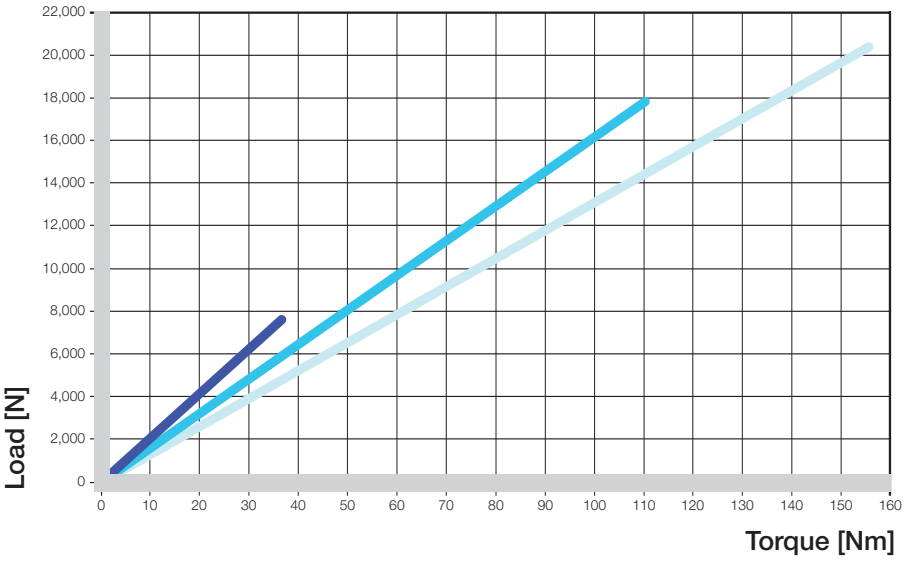
TR8x1.5
TR10x2
TR12x3
TR14x4

Diagram 06:
Required drive torque
Lead screw drives ø8 to ø14
- assuming μ = 0.25, without consideration given to the lead screw supports.



TR16x4
TR18x4
TR20x4
TR24x5

Diagram 07:
Required drive torque
Lead screw drives ø16 bis ø24
- assuming μ = 0.25, without consideration given to the lead screw supports.



TR30x6
TR40x7
TR50x8

Diagram 08:
Required drive torque
Lead screw drives ø30 bis ø50
- assuming μ = 0.25, without consideration given to the lead screw supports.

drylin® Lead Screw Drives | Technical Data

Max. acceptable pv-value

With the pv-value and the surface bearing length ratio specified in the dimension tables, the permissible surface speed and the feed rate can be determined for each thread size.

Duty cycle (ESD)	pv-Value$_{max.}$ [MPa · m/s] (applies to iglidur® J, W300, A180 and J350)
100 %	0.08
50 %	0.2
10 %	0.4

Table 03: Reference values when using drylin® plastic nuts without lubrication (with stroke 500 mm). A compensation factor must be used with very short or very long strokes.

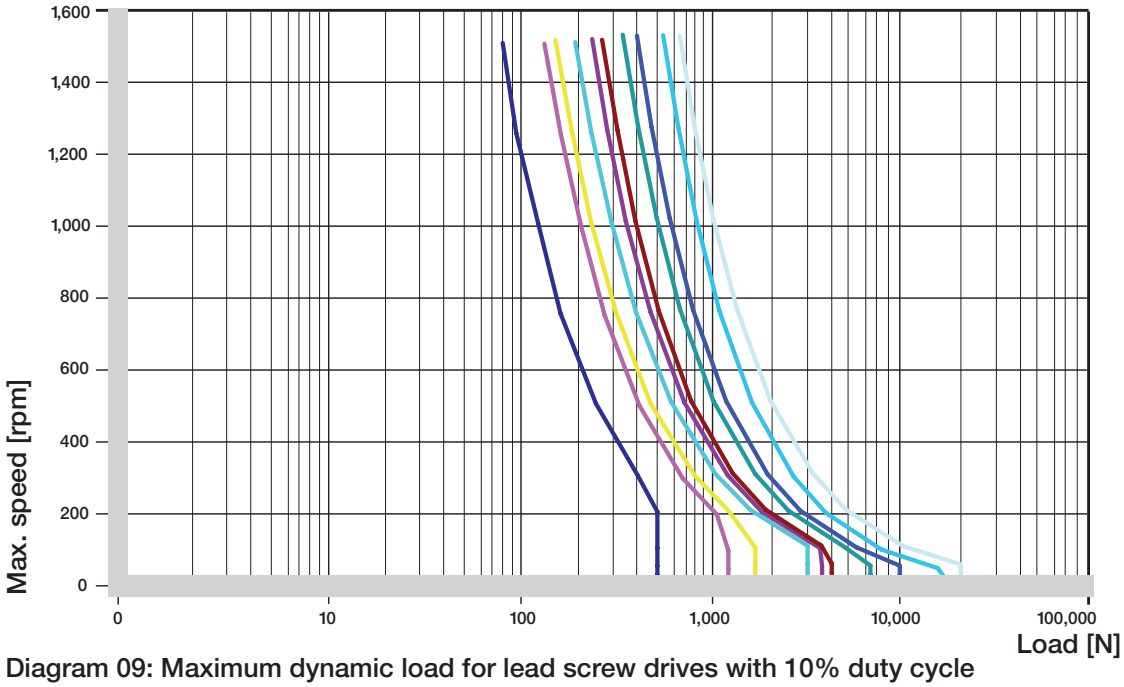


Diagram 09: Maximum dynamic load for lead screw drives with 10% duty cycle

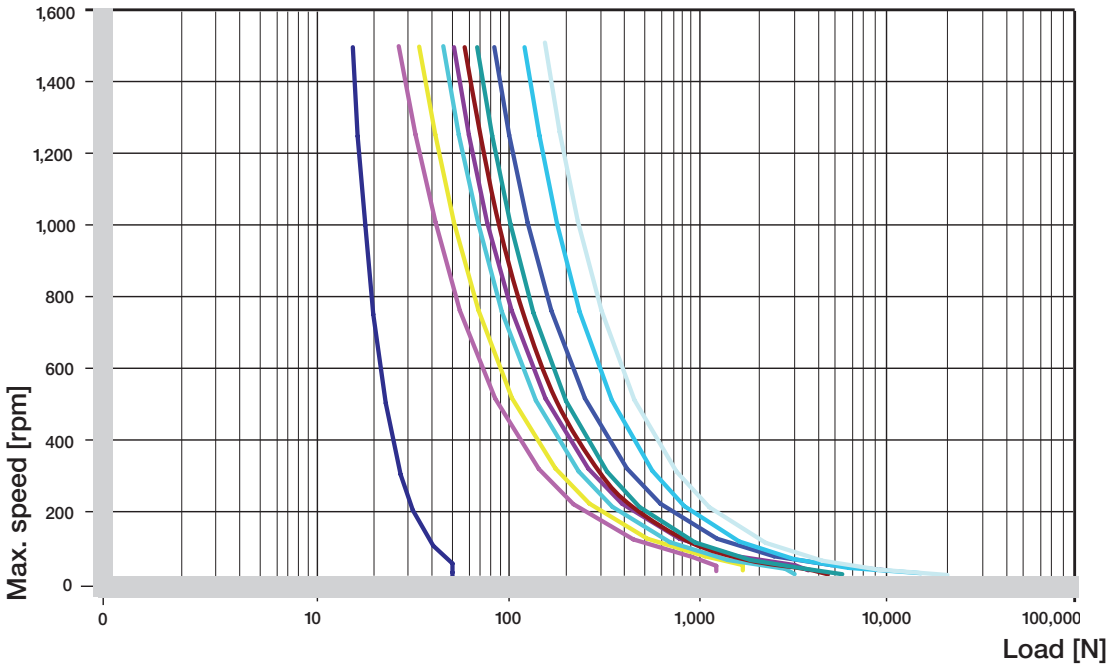
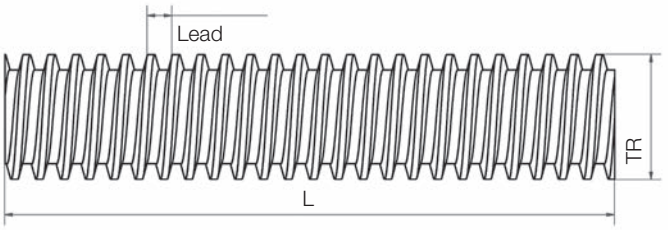


Diagram 10: Maximum dynamic load for lead screw drives with 100% duty cycle

TR8x1.5 | TR10x2 | TR12x3 | TR16x4 | TR18x4
TR20x4 | TR24x5 | TR30x6 | TR40x7 | TR50x8

drylin® Lead Screw Drives | Product Range

Trapezoidal lead screws



PTGSG-08x1.5-01-R-1000-ES

- blank = C15, rolled (Standard)
  ES = Stainless steel (Standard)
  C45 = C45 (on request)
- Length in mm
- Hand of rotation
- Number of turns
- Lead
- Diameter
- Marking

Helix deviation 0.1 mm / 300 mm
Straightness 0.3 mm / 300 mm
Tolerance 7e

Single start trapezoidal lead screws - Dimensions [mm]

Part number		Thread	Ø	Lead	Max. Length
PTGSG-08x1.5-01-R*-☐**		TR8x1.5	8	1.5	1,000
PTGSG-10x2-01-R*-☐**		TR10x2	10	2	1,000
PTGSG-10x3-01-R*-☐**		TR10x3	10	3	1,000
PTGSG-12x3-01-R*-☐**		TR12x3	12	3	2,000
PTGSG-14x3-01-R*-☐**	New!	TR14x3	14	3	3,000
PTGSG-14x4-01-R*-☐**		TR14x4	14	4	3,000
PTGSG-16x2-01-R*-☐**	New!	TR16x2	16	2	3,000
PTGSG-16x4-01-R*-☐**		TR16x4	16	4	3,000
PTGSG-18x4-01-R*-☐**		TR18x4	18	4	3,000
PTGSG-20x4-01-R*-☐**		TR20x4	20	4	3,000
PTGSG-24x5-01-R*-☐**		TR24x5	24	5	3,000
PTGSG-26x5-01-R*-☐**		TR26x5	26	5	3,000
PTGSG-28x5-01-R*-☐**		TR28x5	28	5	3,000
PTGSG-30x6-01-R*-☐**		TR30x6	30	6	3,000
PTGSG-36x6-01-R*-☐**		TR36x6	36	6	3,000
PTGSG-40x7-01-R*-☐**		TR40x7	40	7	3,000
PTGSG-50x8-01-R*-☐**		TR50x8	50	8	3,000

Two start trapezoidal lead screws - Dimensions [mm]

Part number		Thread	Ø	Lead	Max. Length
PTGSG-12x6P3-02-R*-☐**	New!	TR12x6P3	12	6	2,000
PTGSG-16x8P4-02-R*-☐**	New!	TR16x8P4	16	8	3,000
PTGSG-18x8P4-02-R*-☐**	New!	TR18x8P4	18	8	3,000
PTGSG-20x8P4-02-R*-☐**	New!	TR20x8P4	20	8	3,000

* also available with left-hand thread "-L", ** Length in mm

Please use the "-ES" suffix for stainless steel lead screws; please use the "-C45" suffix for lead screws made from C45

drylin® Lead Screw Drives | Product Range

Trapezoidal lead screws made from anodized aluminum

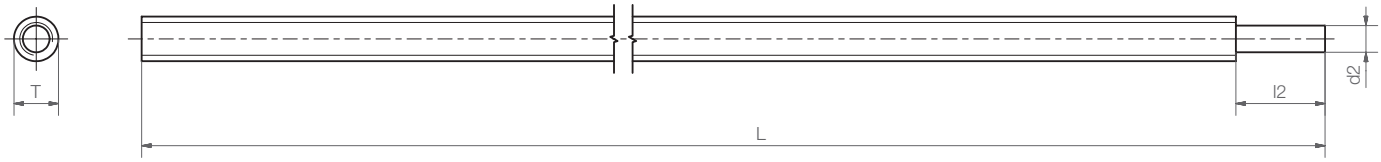
The tensile/compressive strength of the lead screw material EN AW6060 is 160 MPa per mm² (elongation limit 0.2 mm)

Dimensions [mm]

Part number		Thread	Ø	Lead	Max. Length
PTGSG-10x2-01-R*-[ ]**-AL	New!	TR10x2	10	2	1,000
PTGSG-12x3-01-R*-[ ]**-AL	New!	TR12x3	12	3	1,000
PTGSG-16x4-01-R*-[ ]**-AL	New!	TR16x4	16	4	1,000
PTGSG-18x4-01-R*-[ ]**-AL	New!	TR18x4	18	4	2,000
PTGSG-20x4-01-R*-[ ]**-AL	New!	TR20x4	20	4	2,000

* also available with left-hand thread „-L", ** Length in mm

Trapezoidal lead screws with machined end



Dimensions [mm]

Part number		Thread	l2	d2	Material	Max. Length
PTGSG-10X2-01-R-[ ]*-Z17	New!	TR10x2	17	6 h9	C15	1,000
PTGSG-10X2-01-R-[ ]*-Z-17-ES	New!	TR10x2	17	6 h9	ES	1,000
PTGSG-14X4-01-R-[ ]*-Z-20	New!	TR14x4	20	8 h9	C15	2,000
PTGSG-14X4-01-R-[ ]*-Z-20-ES	New!	TR14x4	20	8 h9	ES	2,000
PTGSG-18X4-01-R-[ ]*-Z-118	New!	TR18x4	118	12 h9	C15	2,000
PTGSG-18X4-01-R-[ ]*-Z-118-ES	New!	TR18x4	118	12 h9	ES	2,000
PTGSG-24X5-01-R-[ ]*-Z-144	New!	TR24x5	144	14 h9	C15	2,000
PTGSG-24X5-01-R-[ ]*-Z-144-ES	New!	TR24x5	144	14 h9	ES	2,000

* Length in mm, with left-hand thread on requestt

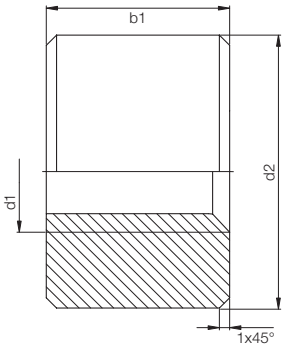
All drylin® precision leads screws can be custom machined. Please send us your drawing. We will submit an offer to you in a short time.
We would also be pleased to discuss other metric lead screws, custom materials, or more accurate versions.

delivery time from stock

prices price list online
www.igus.co.uk/en/drylin-leadscrewdrives

drylin® Lead Screw Drives | Product Range

Cylindrical trapezoidal lead screw nuts, made from iglidur® J, right-hand thread



Order key

JSRM-2220TR10x2

- Thread
- b1
- d2
- Metric
- Hand of rotation
- Type S = cylindrical
- Material iglidur® J

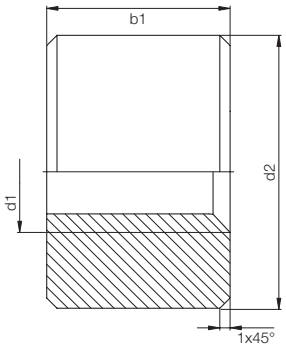
Dimensions [mm]

Part number		Effective supporting surface [mm²]	d2 h9	b1	Thread d1 x P	max. stat. F axial [N]
JSRM-1418TR8x1.5	New!	205	14	18	TR8x1.5	500*
JSRM-1812TR8x1.5		136	18	12	TR8x1.5	544
JSRM-2215TR10x2	New!	212	22	15	TR10x2	848
JSRM-2220TR10x2		282	22	20	TR10x2	1,128
JSRM-2215TR10x3	New!	200	22	15	TR10x3	800
JSRM-2220TR10x3		266	22	20	TR10x3	1,064
JSRM-2618TR12x3	New!	297	26	18	TR12x3	1,188
JSRM-2624TR12x3		394	26	24	TR12x3	1,576
JSRM-3028TR14x3	New!	550	30	28	TR14x3	2,200
JSRM-3021TR14x4	New!	396	30	21	TR14x4	1,584
JSRM-3028TR14x4		526	30	28	TR14x4	2,104
JSRM-3624TR16x2	New!	564	36	24	TR16x2	2,256
JSRM-3632TR16x2		702	36	32	TR16x2	3,008
JSRM-3024TR16x4	New!	527	30	24	TR16x4	2,108
JSRM-3624TR16x4	New!	526	36	24	TR16x4	2,104
JSRM-3632TR16x4		752	36	32	TR16x4	2,808
JSRM-3027TR18x4	New!	678	30	27	TR18x4	2,362*
JSRM-4027TR18x4	New!	678	40	27	TR18x4	2,712
JSRM-4036TR18x4		904	40	36	TR18x4	3,616
JSRM-3025TR20x4	New!	706	30	25	TR20x4	2,060*
JSRM-4530TR20x4	New!	848	45	30	TR20x4	3,392
JSRM-4540TR20x4		1,130	45	40	TR20x4	4,520
JSRM-5036TR24x5	New!	1,214	50	36	TR24x5	4,856
JSRM-5048TR24x5		1,620	50	48	TR24x5	6,480
JSRM-5039TR26x5	New!	1,438	50	39	TR26x5	5,752
JSRM-5052TR26x5		1,918	50	52	TR26x5	7,672
JSRM-6042TR28x5	New!	1,680	60	42	TR28x5	6,720
JSRM-6056TR28x5		2,240	60	56	TR28x5	8,960
JSRM-6045TR30x6	New!	1,906	60	45	TR30x6	7,624
JSRM-6060TR30x6		2,542	60	60	TR30x6	10,168
JSRM-6060TR32x6	New!	2,730	60	60	TR32x6	10,920
JSRM-7572TR36x6		3,732	75	72	TR36x6	15,274
JSRM-7680TR40x7		4,582	76	80	TR40x7	17,837
JSRM-90100TR50x8		7,225	90	100	TR50x8	20,400

* reduced axial load due to nut geometry

drylin® Lead Screw Drives | Product Range

Cylindrical trapezoidal lead screw nuts, made from iglidur® J, left-hand thread



Order key

JSLM-2220TR10x2

- Thread
- b1
- d2
- Metric
- Hand of rotation
- Type S = cylindrical
- Material iglidur® J

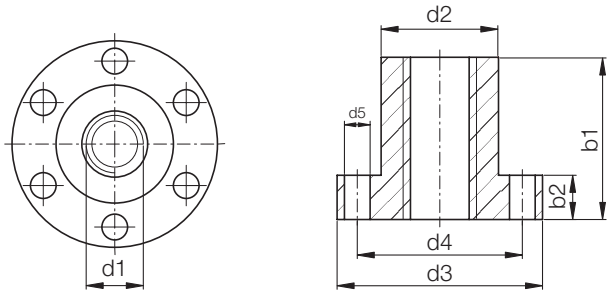
Dimensions [mm]

Part number		Effective supporting surface [mm²]	d2 h9	b1	Thread d1 x P	max. stat. F axial [N]
JSLM-1418TR8x1.5	New!	205	14	18	TR8x1.5	500*
JSLM-1812TR8x1.5		136	18	12	TR8x1.5	544
JSLM-2215TR10x2	New!	212	22	15	TR10x2	848
JSLM-2220TR10x2		282	22	20	TR10x2	1,128
JSLM-2215TR10x3	New!	200	22	15	TR10x3	800
JSLM-2220TR10x3		266	22	20	TR10x3	1,064
JSLM-2618TR12x3	New!	297	26	18	TR12x3	1,188
JSLM-2624TR12x3		394	26	24	TR12x3	1,576
JSLM-3021TR14x4	New!	396	30	21	TR14x4	1,584
JSLM-3028TR14x4		526	30	28	TR14x4	2,104
JSLM-3624TR16x2	New!	564	36	24	TR16x2	2,256
JSLM-3632TR16x2		702	36	32	TR16x2	3,008
JSLM-3024TR16x4	New!	527	30	24	TR16x4	2,108
JSLM-3624TR16x4	New!	526	36	24	TR16x4	2,104
JSLM-3632TR16x4		752	36	32	TR16x4	2,808
JSLM-3027TR18x4	New!	678	30	27	TR18x4	2,362*
JSLM-4027TR18x4	New!	678	40	27	TR18x4	2,712
JSLM-4036TR18x4		904	40	36	TR18x4	3,616
JSLM-3025TR20x4	New!	706	30	25	TR20x4	2,060*
JSLM-4530TR20x4	New!	848	45	30	TR20x4	3,392
JSLM-4540TR20x4		1,130	45	40	TR20x4	4,520
JSLM-5036TR24x5	New!	1,214	50	36	TR24x5	4,856
JSLM-5048TR24x5		1,620	50	48	TR24x5	6,480
JSLM-5039TR26x5	New!	1,438	50	39	TR26x5	5,752
JSLM-5052TR26x5		1,918	50	52	TR26x5	7,672
JSLM-6042TR28x5	New!	1,680	60	42	TR28x5	6,720
JSLM-6056TR28x5		2,240	60	56	TR28x5	8,960
JSLM-6045TR30x6	New!	1,906	60	45	TR30x6	7,624
JSLM-6060TR30x6		2,542	60	60	TR30x6	10,168
JSLM-6060TR32x6	New!	2,730	60	60	TR32x6	10,920
JSLM-7572TR36x6		3,732	75	72	TR36x6	15,274
JSLM-7680TR40x7		4,582	76	80	TR40x7	17,837
JSLM-90100TR50x8		7,225	90	100	TR50x8	20,400

* reduced axial load due to nut geometry

drylin® Lead Screw Drives | Product Range

Trapezoidal lead screw nuts with flange, made from iglidur® J, right-hand thread



Order key

JFRM-2020TR8x1.5

- Thread
- b1
- d2
- Metric
- Hand of rotation
- Type F = with flange
- Material iglidur® J

Dimensions [mm]

Part number	Effective supporting surface [mm²]	d2 h9	d3	d4	d5	b1	b2	Thread d1 x P	max. stat. F axial [N]
JFRM-2020TR8x1.5 New!	225	20	36	28	4	20	8	TR8x1.5	900
JFRM-2525TR10x2	352	25	42	34	5	25	10	TR10x2	1,408
JFRM-2525TR10x3 New!	334	25	42	34	5	25	10	TR10x3	1,336
JFRM-2835TR12x3	576	28	48	38	6	35	12	TR12x3	2,304
JFRM-2835TR14x3 New!	687	28	48	38	6	35	12	TR14x3	2,748
JFRM-2835TR14x4	658	28	48	38	6	35	12	TR14x4	2,632
JFRM-2835TR16x2 New!	822	28	48	38	6	35	12	TR16x2	3,290
JFRM-2835TR16x4	768	28	48	38	6	35	12	TR16x4	3,072
JFRM-2835TR18x4	878	28	48	38	6	35	12	TR18x4	3,512
JFRM-3244TR20x4	1,242	32	55	45	7	44	12	TR20x4	4,968
JFRM-3244TR24x5	1,484	32	55	45	7	44	12	TR24x5	5,936
JFRM-3846TR26x5	1,696	38	62	50	7	46	14	TR26x5	6,320*
JFRM-3846TR28x5	1,840	38	62	50	7	46	14	TR28x5	4,560*
JFRM-3846TR30x6	1,948	38	62	50	7	46	14	TR30x6	3,576*
JFRM-4546TR30x6	1,948	45	70	58	7	46	16	TR30x6	9,740
JFRM-4588TR36x6 New!	4,561	45	70	58	7	88	16	TR36x6	7,580*

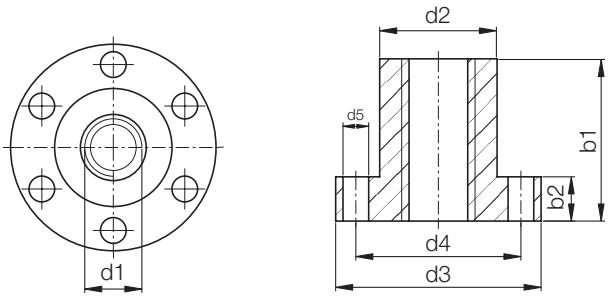
* reduced axial load due to nut geometry

delivery time from stock

prices price list online
www.igus.co.uk/en/jfrm

drylin® Lead Screw Drives | Product Range

Trapezoidal lead screw nuts with flange, made from iglidur® J, left-hand thread



Order key

JFLM-2020TR8x1.5

- Thread
- b1
- d2
- Metric
- Hand of rotation
- Type F = with flange
- Material iglidur® J

Dimensions [mm]

Part number	Effective supporting surface [mm²]	d2 h9	d3	d4	d5	b1	b2	Thread d1 x P	max. stat. F axial [N]
JFLM-2020TR8x1.5 New!	225	20	36	28	4	20	8	TR8x1.5	900
JFLM-2525TR10x2	352	25	42	34	5	25	10	TR10x2	1,408
JFLM-2835TR12x3	576	28	48	38	6	35	12	TR12x3	2,304
JFLM-2835TR14x4	658	28	48	38	6	35	12	TR14x4	2,632
JFLM-2835TR16x4	768	28	48	38	6	35	12	TR16x4	3,072
JFLM-2835TR18x4	878	28	48	38	6	35	12	TR18x4	3,512
JFLM-3244TR20x4	1,242	32	55	45	7	44	12	TR20x4	4,968
JFLM-3244TR24x5	1,484	32	55	45	7	44	12	TR24x5	5,936
JFLM-3846TR26x5	1,696	38	62	50	7	46	14	TR26x5	6,320*
JFLM-3846TR28x5	1,840	38	62	50	7	46	14	TR28x5	4,560*
JFLM-3846TR30x6	1,948	38	62	50	7	46	14	TR30x6	3,576*
JFLM-4546TR30x6	1,948	45	70	58	7	46	16	TR30x6	9,740

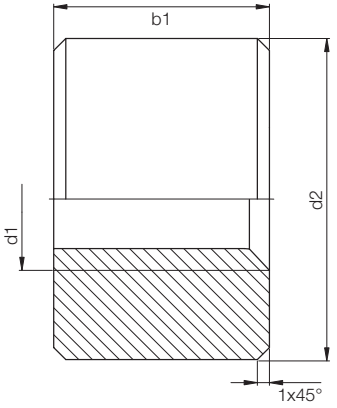
* reduced axial load due to nut geometry

delivery time from stock

prices price list online
www.igus.co.uk/en/jflm

drylin® Lead Screw Drives | Product Range

Cylindrical trapezoidal lead screw nuts, made from iglidur® W300, right-hand thread



Order key

WSRM-2215TR10x2

- Thread
- b1
- d2
- Metric
- Hand of rotation
- Type S =cylindrical
- Material iglidur® W300

Dimensions [mm]

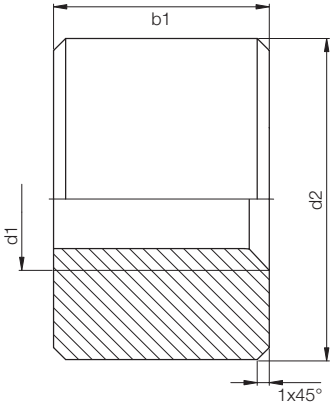
Part number short	Effective supporting surface [mm²]	d2 h9	b1	Thread d1 x P	max. stat. F axial [N]
WSRM-2215TR10x2	212	22	15	TR10x2	1,060
WSRM-2215TR10x3	200	22	15	TR10x3	1,000
WSRM-2618TR12x3	296	26	18	TR12x3	1,480
WSRM-3021TR14x4	396	30	21	TR14x4	1,980
WSRM-3624TR16x2	564	36	24	TR16x2	2,820
WSRM-3024TR16x4	526	30	24	TR16x4	2,630
WSRM-3624TR16x4	526	36	24	TR16x4	2,830
WSRM-3027TR18x4	678	30	27	TR18x4	3,390
WSRM-4027TR18x4	678	40	27	TR18x4	3,390
WSRM-3025TR20x4	706	30	25	TR20x4	3,530
WSRM-4530TR20x4	848	45	30	TR20x4	4,240
WSRM-5036TR24x5	1,214	50	36	TR24x5	6,070
WSRM-5039TR26x5	1,438	50	39	TR26x5	7,190
WSRM-6042TR28x5	1,680	60	42	TR28x5	8,400
WSRM-6045TR30x6	1,906	60	45	TR30x6	9,530

Dimensions [mm]

Part number long	Effective supporting surface [mm²]	d2 h9	b1	Thread d1 x P	max. stat. F axial [N]
WSRM-2220TR10x2	282	22	20	TR10x2	1,410
WSRM-2220TR10x3	266	22	20	TR10x3	1,330
WSRM-2624TR12x3	394	26	24	TR12x3	1,970
WSRM-3028TR14x4	526	30	28	TR14x4	2,630
WSRM-3632TR16x2	702	36	32	TR16x2	3,760
WSRM-3632TR16x4	752	36	32	TR16x4	3,510
WSRM-4036TR18x4	904	40	36	TR18x4	4,520
WSRM-4540TR20x4	1,130	45	40	TR20x4	5,650
WSRM-5048TR24x5	1,620	50	48	TR24x5	8,100
WSRM-5052TR26x5	1,918	50	52	TR26x5	9,590
WSRM-6056TR28x5	2,240	60	56	TR28x5	11,200
WSRM-6060TR30x6	2,542	60	60	TR30x6	12,710

drylin® Lead Screw Drives | Product Range

Cylindrical trapezoidal lead screw nuts, made from iglidur® W300, left-hand thread



Order key

WSLM-2215TR10x2

- Thread
- b1
- d2
- Metric
- Hand of rotation
- Type S =cylindrical
- Material iglidur® W300

Dimensions [mm]

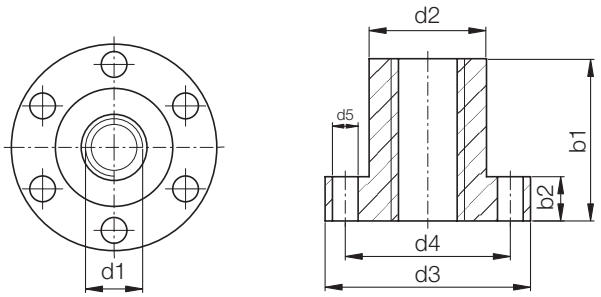
Part number short	Effective supporting surface [mm²]	d2 h9	b1	Thread d1 x P	max. stat. F axial [N]
WSLM-2215TR10x2	212	22	15	TR10x2	1,060
WSLM-2215TR10x3	200	22	15	TR10x3	1,000
WSLM-2618TR12x3	296	26	18	TR12x3	1,480
WSLM-3021TR14x4	396	30	21	TR14x4	1,980
WSLM-3624TR16x2	564	36	24	TR16x2	2,820
WSLM-3024TR16x4	526	30	24	TR16x4	2,630
WSLM-3624TR16x4	526	36	24	TR16x4	2,830
WSLM-3027TR18x4	678	30	27	TR18x4	3,390
WSLM-4027TR18x4	678	40	27	TR18x4	3,390
WSLM-3025TR20x4	706	30	25	TR20x4	3,530
WSLM-4530TR20x4	848	45	30	TR20x4	4,240
WSLM-5036TR24x5	1,214	50	36	TR24x5	6,070
WSLM-5039TR26x5	1,438	50	39	TR26x5	7,190
WSLM-6042TR28x5	1,680	60	42	TR28x5	8,400
WSLM-6045TR30x6	1,906	60	45	TR30x6	9,530

Dimensions [mm]

Part number long	Effective supporting surface [mm²]	d2 h9	b1	Thread d1 x P	max. stat. F axial [N]
WSLM-2220TR10x2	282	22	20	TR10x2	1,410
WSLM-2220TR10x3	266	22	20	TR10x3	1,330
WSLM-2624TR12x3	394	26	24	TR12x3	1,970
WSLM-3028TR14x4	526	30	28	TR14x4	2,630
WSLM-3632TR16x2	702	36	32	TR16x2	3,760
WSLM-3632TR16x4	752	36	32	TR16x4	3,510
WSLM-4036TR18x4	904	40	36	TR18x4	4,520
WSLM-4540TR20x4	1,130	45	40	TR20x4	5,650
WSLM-5048TR24x5	1,620	50	48	TR24x5	8,100
WSLM-5052TR26x5	1,918	50	52	TR26x5	9,590
WSLM-6056TR28x5	2,240	60	56	TR28x5	11,200
WSLM-6060TR30x6	2,542	60	60	TR30x6	12,710

drylin® Lead Screw Drives | Product Range

Trapezoidal lead screw nuts with flange, made from iglidur® W300, right-hand thread



Order key

WFRM-2525TR10x2

- Thread
- b1
- d2
- Metric
- Hand of rotation
- Type F = with flange
- Material iglidur® 300

Dimensions [mm]

Part number	Effective supporting surface [mm²]	d2 h9	d3	d4	d5	b1	b2	Thread d1 x P	max. stat. F axial [N]
WFRM-2525TR10x2	352	25	42	34	5	25	10	TR10x2	1,760
WFRM-2525TR10x3 New!	334	25	42	34	5	25	10	TR10x3	1,670
WFRM-2835TR12x3	576	28	48	38	6	35	12	TR12x3	2,880
WFRM-2835TR14x4	658	28	48	38	6	35	12	TR14x4	3,290
WFRM-2835TR16x2 New!	822	28	48	38	6	35	12	TR16x2	4,110
WFRM-2835TR16x4	768	28	48	38	6	35	12	TR16x4	3,840
WFRM-2835TR18x4	878	28	48	38	6	35	12	TR18x4	4,390
WFRM-3244TR20x4	1,242	32	55	45	7	44	12	TR20x4	6,210
WFRM-3244TR24x5	1,484	32	55	45	7	44	12	TR24x5	7,420
WFRM-3846TR26x5	1,696	38	62	50	7	46	14	TR26x5	7,900*
WFRM-3846TR28x5	1,840	38	62	50	7	46	14	TR28x5	5,900*
WFRM-3846TR30x6	1,948	38	62	50	7	46	14	TR30x6	4,470*

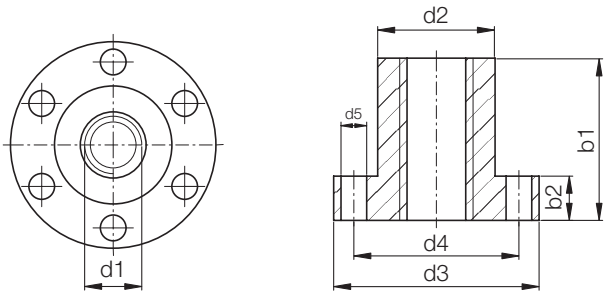
* reduced axial load due to nut geometry

delivery time from stock

prices price list online
www.igus.co.uk/en/wfrm

drylin® Lead Screw Drives | Product Range

Trapezoidal lead screw nuts with flange, made from iglidur® W300, left-hand thread



Order key

WFLM-2525TR10x2

- Thread
- b1
- d2
- Metric
- Hand of rotation
- Type F = with flange
- Material iglidur® W300

Dimensions [mm]

Part number	Effective supporting surface [mm²]	d2 h9	d3	d4	d5	b1	b2	Thread d1 x P	max. stat. F axial [N]
WFLM-2525TR10x2	352	25	42	34	5	25	10	TR10x2	1,760
WFLM-2835TR12x3	576	28	48	38	6	35	12	TR12x3	2,880
WFLM-2835TR14x4	658	28	48	38	6	35	12	TR14x4	3,290
WFLM-2835TR16x2 New!	822	28	48	38	6	35	12	TR16x2	4,110
WFLM-2835TR16x4	768	28	48	38	6	35	12	TR16x4	3,840
WFLM-2835TR18x4	878	28	48	38	6	35	12	TR18x4	4,390
WFLM-3244TR20x4	1,242	32	55	45	7	44	12	TR20x4	6,210
WFLM-3244TR24x5	1,484	32	55	45	7	44	12	TR24x5	7,420
WFLM-3846TR26x5	1,696	38	62	50	7	46	14	TR26x5	7,900*
WFLM-3846TR28x5	1,840	38	62	50	7	46	14	TR28x5	5,900*
WFLM-3846TR30x6	1,948	38	62	50	7	46	14	TR30x6	4,470*

* reduced axial load due to nut geometry

delivery time from stock

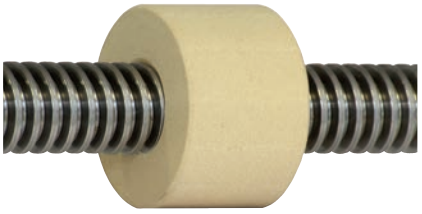
prices price list online
www.igus.co.uk/en/wflm

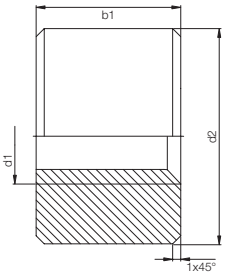
New in this catalog!

drylin® Lead Screw Drives | Product Range

Trapezoidal lead screw nuts with flange, made from iglidur® J350, right-hand thread

cylindrical





Order key

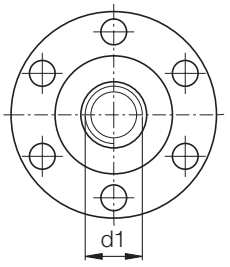
J350SRM-1812TR8x1.5

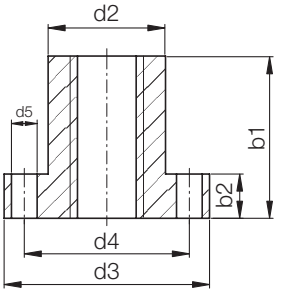
- Thread
- b1
- d2
- Metric
- Hand of rotation
- Type S = cylindrical
- Material
- iglidur® J350

Dimensions [mm]

Part number		Effective supporting surface [mm²]	d2 h9	b1	Thread d1 x P	max. stat. F axial [N]
J350SRM-1812TR8x1.5	New!	136	18	12	TR8x1.5	272
J350SRM-2215TR10x2	New!	212	22	15	TR10x2	424
J350SRM-2624TR12x3	New!	394	26	24	TR12x3	788
J350SRM-3024TR16x4	New!	527	30	24	TR16x4	1,054
J350SRM-4027TR18x4	New!	678	40	27	TR18x4	1,356

with flange





Dimensions [mm]

Part number		Effective supporting surface [mm²]	d2 h9	d3 h9	d4	d5	b1	b2	Thread d1 x P	max. stat. F axial [N]
J350FRM-2020TR8x1.5	New!	225	20	36	28	4	20	8	TR8x1.5	450

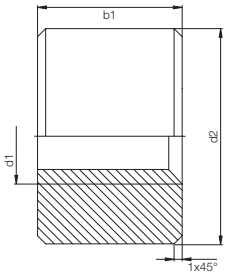
delivery time from stock

prices price list online
www.igus.co.uk/en/j350srm
www.igus.co.uk/en/j350frm

drylin® Lead Screw Drives | Product Range

Trapezoidal lead screw nuts with flange, made from iglidur® A180, right-hand thread

cylindrical



Order key

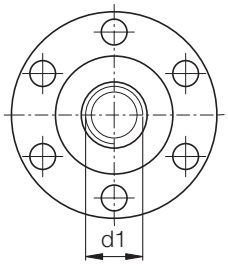
A180SRM-1812TR8x1.5

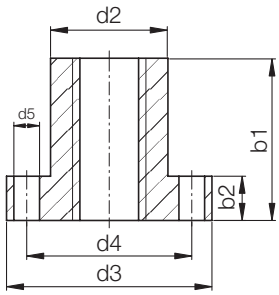
Thread
b1
d2
Metric
Hand of rotation
Type S = cylindrical
Material
iglidur® A180

Dimensions [mm]

Part number		Effective supporting surface [mm²]	d2 h9	b1	Thread d1 x P	max. stat. F axial [N]
A180SRM-1812TR8x1.5	New!	136	18	12	TR8x1.5	476
A180SRM-2215TR10x2	New!	212	22	15	TR10x2	742
A180SRM-2624TR12x3	New!	394	26	24	TR12x3	1,379
A180SRM-3024TR16x4	New!	527	30	24	TR16x4	1,845
A180SRM-4027TR18x4	New!	678	40	27	TR18x4	2,373
A180SRM-3025TR20x4	New!	706	30	25	TR20x4	2,471
A180SRM-4540TR20x4	New!	1,130	45	40	TR20x4	3,955

with flange





Dimensions [mm]

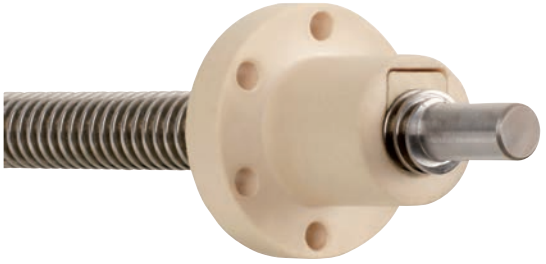
Part number		Effective supporting surface [mm²]	d2 h9	d3 h9	d4	d5	b1	b2	Thread d1 x P	max. stat. F axial [N]
A180FRM-2020TR8x1.5	New!	225	20	36	28	4	20	8	TR8x1.5	788
A180FRM-2525TR10x2	New!	352	25	42	34	5	25	10	TR10x2	1,232
A180FRM-2835TR12x3	New!	576	28	48	38	6	35	12	TR10x3	2,016
A180FRM-2835TR16x4	New!	768	28	48	38	6	35	12	TR16x4	2,458
A180FRM-2835TR18x4	New!	878	28	48	38	6	35	12	TR18x4	2,810
A180FRM-3244TR20x4	New!	1,242	32	55	45	7	44	12	TR20x4	3,974

delivery time from stock

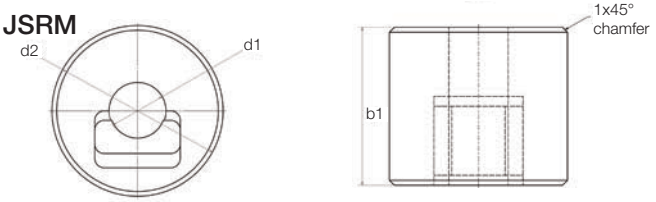
€ prices price list online
www.igus.co.uk/en/a180srm
www.igus.co.uk/en/a180frm

drylin® Lead Screw Drives | Product Range

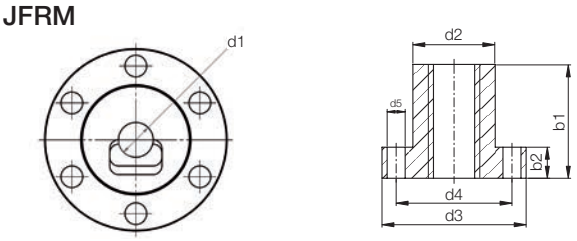
Anti-backlash lead screw nuts, made from iglidur® J, right-hand thread



JSRM



JFRM



Order key

JSRM-AB-2220TR8x1.5

- Thread
- b1
- d2
- Anti-backlash
- Metric
- Hand of rotation
- Type S = cylindrical
- Material iglidur® J

Anti-Backlash refers to axial clearence at the end of the stroke when you have to go in the other direction. The Anti-Backlash leadscrew nuts reduce this clearance of the entire life of the product.

Dimensions [mm]

Part number		d2	b1	Thread	max. stat. F axial
cylindrical		h9		d1 x P	[N]
JSRM-AB-2220-TR8x1.5	New!	22	20	TR8x1.5	500
JSRM-AB-2220-TR10x2		22	20	TR10x2	840
JSRM-AB-2624-TR12x3	New!	26	24	TR12x3	1,185
JSRM-AB-3632-TR16x4	New!	36	32	TR16x4	2,110
JSRM-AB-4036-TR18x4		40	36	TR18x4	2,700
JSRM-AB-4540-TR20x4	New!	45	40	TR20x4	3,400
JSRM-AB-5048-TR24x5		50	48	TR24x5	4,800

Dimensions [mm]

Part number		d2	d3	d4	d5	b1	b2	Thread	max. stat. F axial
with flange		h9						d1 x P	[N]
JFRM-AB-2525-TR10x2		25	42	34	5	25	10	TR10x2	1,160
JFRM-AB-2525-TR10X3	New!	25	42	34	5	25	10	TR10x3	1,110
JFRM-AB-2835-TR14x4	New!	28	48	38	6	35	12	TR14x4	2,390
JFRM-AB-2835-TR16x2	New!	28	48	38	6	35	12	TR16x2	2,300
JFRM-AB-2835-TR16x4		28	48	38	6	35	12	TR16x4	2,520
JFRM-AB-2835-TR18x4		28	48	38	6	35	12	TR18x4	2,890
JFRM-AB-3244-TR20x4		32	55	45	7	44	12	TR20x4	4,080
JFRM-AB-3244-TR24x5		32	55	45	7	44	12	TR24x5	4,890

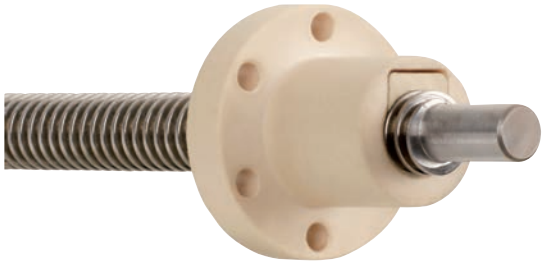
Other thread sizes and nut designs with Anti-backlash function upon request

delivery time from stock

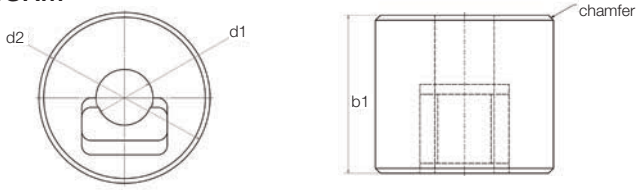
prices price list online
www.igus.co.uk/en/jsrm-ab

drylin® Lead Screw Drives | Product Range

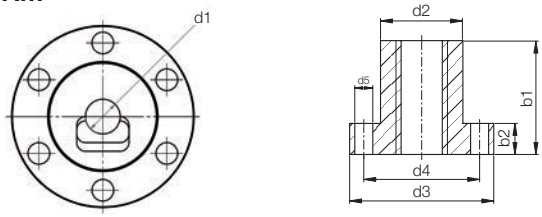
Anti-backlash lead screw nuts, made from iglidur® J, left-hand thread



JSRM



JFRM



Order key

JSLM-AB-2220TR8x1.5

- Thread
- b1
- d2
- Anti-backlash
- Metric
- Hand of rotation
- Type S = cylindrical
- Material iglidur® J

Anti-Backlash refers to axial clearence at the end of the stroke when you have to go in the other direction. The Anti-Backlash leadscrew nuts reduce this clearance of the entire life of the product.

Dimensions [mm]

Part number*	d2	b1	Thread	max. stat. F axial
cylindrical	h9		d1 x P	[N]
JSLM-AB-2220-TR10x2	22	20	TR10x2	840

Dimensions [mm]

Part number*	d2	d3	d4	d5	b1	b2	Thread	max. stat. F axial
with flange	h9						d1 x P	[N]
JFLM-AB-2835-TR16x4	28	48	38	6	35	12	TR16x4	2,520
JFLM-AB-2835-TR18x4	28	48	38	6	35	12	TR18x4	2,890
JFLM-AB-3244-TR20x4	32	55	45	7	44	12	TR20x4	4,080

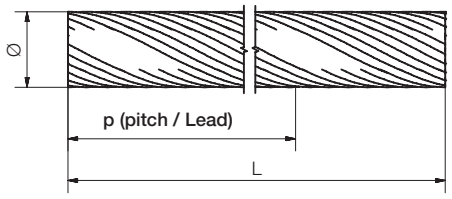
Other thread sizes and nut designs with Anti-backlash function upon request

delivery time from stock

prices price list online
www.igus.co.uk/en/jslm-ab

drylin® Lead Screw Drives | Product Range

High helix lead screws



Order key

PTGSG-08x10-R-1000-ES

- Material: Stainless steel (1.4021)
- Length
- Hand of rotation
- Lead
- Diameter
- Marking

Straightness 0,3 mm / 300 mm

High helix lead screws - Dimensions [mm]

Part number		Thread	Ø	Lead	Max. Length
PTGSG-05x5-R-[ ]**-ES	New!	SG05x5	5.4	5	1,000
PTGSG-06.35x12.7-R-[ ]**-ES	New!	SG06.35x12.7	6.4	12.7	1,000
PTGSG-08x10-R*-[ ]**-ES	New!	SG08x10	8.2	10	2,000
PTGSG-08x15-R*-[ ]**-ES	New!	SG08x15	8.0	15	2,000
PTGSG-10x12-R*-[ ]**-ES		SG10x12	10.0	12	2,000
PTGSG-10x50-R*-[ ]**-ES		SG10x50	10.0	50	2,000
PTGSG-12x25-R*-[ ]**-ES	New!	SG12x25	11.9	25	2,000
PTGSG-18x24-R*-[ ]**-ES	New!	SG18x24	18.7	24	2,000
PTGSG-18x100-R*-[ ]**-ES		SG18x100	18.8	100	2,000

* also available with left-hand thread "-L", ** Length in mm

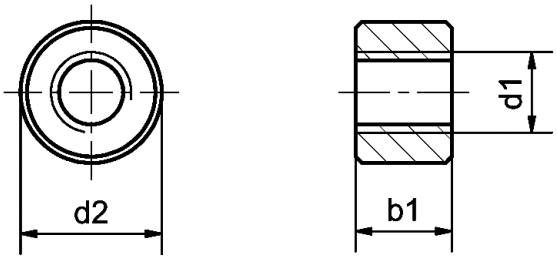
All drylin® leads screws can be custom machined. Please send us your drawing. We will submit an offer to you in a short time. We would also be pleased to discuss other metric lead screws, custom materials, or more accurate versions.

delivery time from stock

prices price list online
www.igus.co.uk/en/drylin-leadscrewdrives

drylin® Lead Screw Drives | Product Range

High helix lead screw nuts, cylindrical



Order key

JSRM-1812SG8x10

- Thread
- b1
- d2
- Metric
- Hand of rotation
- Type S = cylindrical
- Material® iglidur J

Right-hand thread – Dimensions [mm]

Part number		d2 h9	b1	Thread d1 x P
JSRM-1413SG5x5	New!	14	13	SG5x5
JSRM-1413SG6.35x12.7	New!	14	13	SG6.35x12.7
JSRM-1812SG8x10	New!	18	12	SG8x10
JSRM-1812SG8x15	New!	18	12	SG8x15
JSRM-2215SG10x12	New!	22	15	SG10x12
JSRM-2215SG10x50	New!	22	15	SG10x50
JSRM-2220SG10x12		22	20	SG10x12
JSRM-2220SG10x50		22	20	SG10x50
JSRM-2624SG12x25	New!	26	24	SG12x25
JSRM-3027SG18x24	New!	30	27	SG18x24
JSRM-3027SG18x100		30	27	SG18x100
JSRM-4027SG18x100	New!	40	27	SG18x100
JSRM-4036SG18x100	New!	40	36	SG18x100

Left-hand thread – Dimensions [mm]

Part number		d2 h9	b1	Thread d1 x P
JSLM-1812SG8x10	New!	18	12	SG8x10
JSLM-2215SG10x12	New!	22	15	SG10x12
JSLM-2215SG10x50	New!	22	15	SG10x50
JSLM-2220SG10x12		22	20	SG10x12
JSLM-2220SG10x50		22	20	SG10x50
JSLM-3027SG18x100		30	27	SG18x100
JSLM-4027SG18x100	New!	40	27	SG18x100
JSLM-4036SG18x100	New!	40	36	SG18x100

Other thread sizes and nut geometries upon request

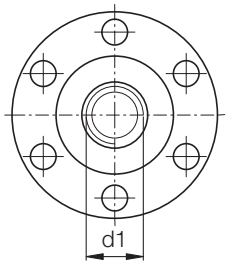
delivery time from stock

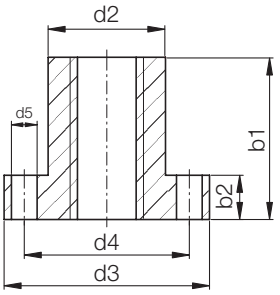
prices price list online
www.igus.co.uk/en/jsrm-sg
www.igus.co.uk/en/jslm-sg

New in this catalog!

drylin® Lead Screw Drives | Product Range

High helix lead screw nuts with flange, made from iglidur® J





Order key

JFRM-2020SG8x10

- Thread
- b1
- d2
- Metric
- Hand of rotation
- Type F = with flange
- Material iglidur® J

Right-hand thread – Dimensions [mm]

Part number		d2 h9	d3	d4	d5	b1	b2	Thread d1 x P
JFRM-1315SG5x5	New!	13	25	19	3	15	5	SG5x5
JFRM-1315SG6.35x12.7	New!	13	25	19	3	15	5	SG6.35x12.7
JFRM-2020SG8x10	New!	20	34	28	4	20	5	SG8x10
JFRM-2020SG8x15	New!	20	34	28	4	20	5	SG8x15
JFRM-2525SG10x12	New!	25	42	34	5	25	10	SG10x12
JFRM-2525SG10x50	New!	25	42	34	5	25	10	SG10x50
JFRM-2835SG12x25	New!	28	48	38	6	35	12	SG12x25
JFRM-2835SG18x24	New!	28	48	38	6	35	12	SG18x24
JFRM-2835SG18x100	New!	28	48	38	6	35	12	SG18x100

Left-hand thread – Dimensions [mm]

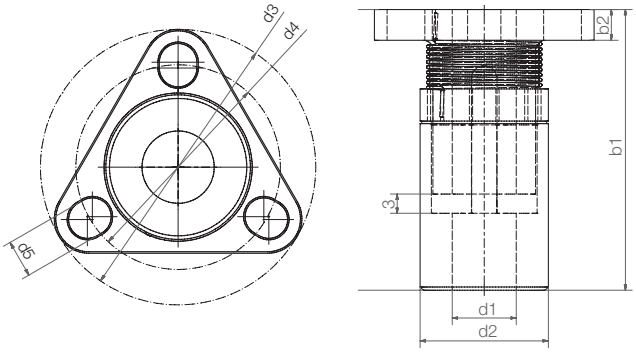
Part number		d2 h9	d3	d4	d5	b1	b2	Thread d1 x P
JFLM-2020SG8x10	New!	20	34	28	4	20	5	SG8x10
JFLM-2525SG10x12	New!	25	42	34	5	25	10	SG10x12
JFLM-2525SG10x50	New!	25	42	34	5	25	10	SG10x50
JFLM-2835SG18x100	New!	28	48	38	6	35	12	SG18x100

delivery time from stock

€ prices price list online
www.igus.co.uk/en/jfrm-sg
www.igus.co.uk/en/jflm-sg

drylin® Lead Screw Drives | Product Range

Zero backlash lead screw nuts, made from iglidur® J



Order key

JFRM-ZB-0001-HH08x10

- Thread
- Baureihe
- Zero-backlash
- Metric
- Hand of rotation
- Type F = with flange
- Material iglidur® J

Dimensions [mm]

Part number		d1	d2	d3	d4	d5	b1*	b2	Thread d1xP
JFRM-ZB-0001-HH08x10	New!	8	20	38.1	28.3	5.2	41-47	4.8	SG8x10
JFRM-ZB-0001-HH08x15	New!	8	20	38.1	28.3	5.2	41-47	4.8	SG8x15
JFRM-ZB-0001-HH10x12	New!	10	20	38.1	28.3	5.2	41-47	4.8	SG10x12
JFRM-ZB-0001-HH10x50	New!	10	20	38.1	28.3	5.2	41-47	4.8	SG10x50

* variable according to thread pitch/clearance
Custom sizes upon request
can be combined with high helix lead screws ▶ page 972

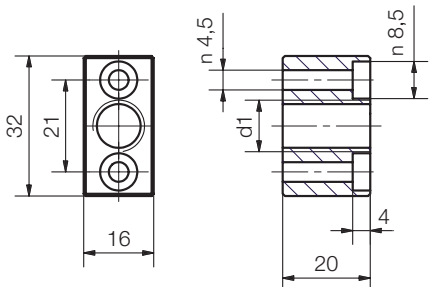
delivery time from stock

prices price list online
www.igus.co.uk/en/jfrm-zb

drylin® Lead Screw Drives | Product Range

The lead screw nuts are in use in our SHT linear modules ▶ **page 1007**

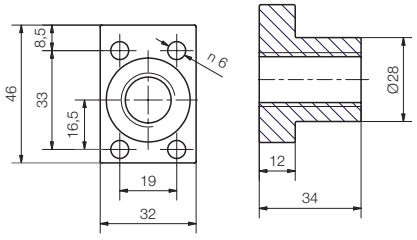
Square lead screw nuts



Dimensions [mm]

Part number		Thread	Hand of rotation	from SHT Linear module
SHT-1210-TRM10x2	New!	TR10x2	right	SHT-12 ▶ page 1024
SHT-1210-TRM10x2-L	New!	TR10x2	left	SHT-12 ▶ page 1024
SHT-1210-TRM10x3	New!	TR10x3	right	SHT-12 ▶ page 1024
SHT-1210-TRM10x3-L	New!	TR10x3	left	SHT-12 ▶ page 1024
SHT-1210-SM10x12		SG10x12	right	SHTS-12 ▶ page 1028
SHT-1210-SM10x12-L	New!	SG10x12	left	SHTS-12 ▶ page 1028
SHT-1210-SM10x50		SG10x50	right	SHTS-12 ▶ page 1028
SHT-1210-SM10x50-L	New!	SG10x50	left	SHTS-12 ▶ page 1028

Lead screw nuts with flange

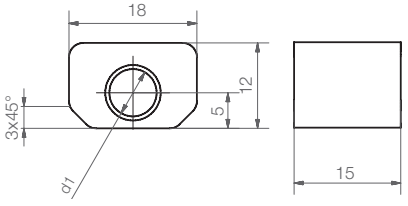


Please note: not symmetrical

Dimensions [mm]

Part number		Thread	Hand of rotation	from SHT Linear module
SHT-2018-SM18x100		SG18x100	right	SHTS-20 ▶ p. 1028
SHT-2018-SM18x100-L	New!	SG18x100	left	SHTS-20 ▶ p. 1028
SHT-2018-TRM18x4	New!	TR18x4	right	SHTS-20 ▶ p. 1028
SHT-2018-TRM18x4-L	New!	TR18x4	left	SHT-20 ▶ p. 1024
SHT-2018-TRM18x8	New!	TR18x8P4	right	SHT-20 ▶ p. 1024
SHT-2018-TRM18x8-L	New!	TR18x8P4	left	SHT-20 ▶ p. 1024

Lead screw nuts



Dimensions [mm]

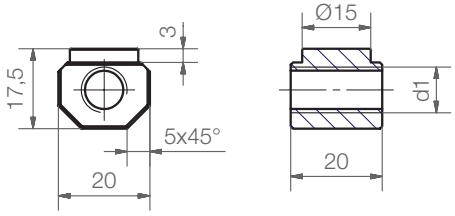
Part number		Thread	Hand of rotation	from SHT Linear module
SWZ-063001	New!	M8x1	right	SLW-0630 ▶ page 1038
SWZ-063003	New!	M8x1	left	SLW-0630 ▶ page 1038
SWZ-063009	New!	TR8x1.5	right	SLW-0630 ▶ page 1038
SWZ-063010	New!	TR8x1.5	left	SLW-0630 ▶ page 1038
SWZ-063007	New!	SG8x10	right	SLW-0630 ▶ page 1038
SWZ-063008	New!	SG8x10	left	SLW-0630 ▶ page 1038
SWZ-063004	New!	SG8x15	right	SLW-0630 ▶ page 1038

delivery time from stock

prices price list online
www.igus.co.uk/en/drylin-leadscrewdrives

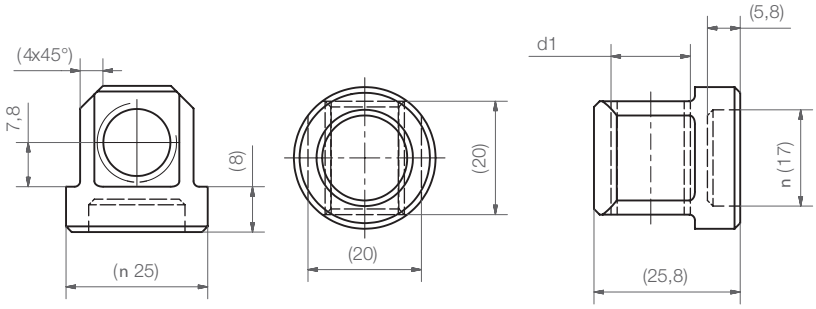
drylin® Lead Screw Drives | Product Range

Lead screw nuts with axial locks



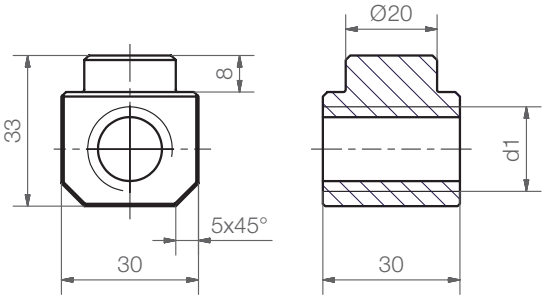
Dimensions [mm]

Part number		Thread	Hand of rotation	from SHT Linear module
SWZ-W-104003	New!	TR10x2	right	SLW-1040 ▶ page 1038
SWZ-W-104004	New!	TR10x2	left	SLW-1040 ▶ page 1038
SWZ-W-104015	New!	TR10x3	left	SLW-1040 ▶ page 1038
SWZ-W-104005	New!	SG10x12	right	SLWS-1040 ▶ page 1041
SWZ-W-104005-L	New!	SG10x12	left	SLWS-1040 ▶ page 1041
SWZ-W-104007	New!	SG10x50	right	SLWS-1040 ▶ page 1041
SWZ-W-104010	New!	SG10x50	left	SLWS-1040 ▶ page 1041



Dimensions [mm]

Part number		Thread	Hand of rotation	from SHT Linear module
SWZ-W-166002	New!	TR14x3	right	SLW-1660 ▶ page 1038
SWZ-W-166001	New!	TR14x4	right	SLW-1660 ▶ page 1038
SWZ-W-166003	New!	TR14x4	left	SLW-1660 ▶ page 1038

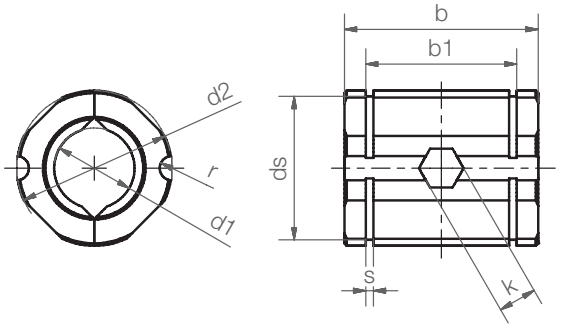


Dimensions [mm]

Part number		Thread	Hand of rotation	from SHT Linear module
SWZ-W-208003	New!	TR18x4	right	SLW-2080 ▶ page 1038
SWZ-W-208004	New!	TR18x4	left	SLW-2080 ▶ page 1038
SWZ-W-208008	New!	TR18x8P4	right	SLW-2080 ▶ page 1038
SWZ-W-208009	New!	TR18x8P4	left	SLW-2080 ▶ page 1038
SWZ-W-208006	New!	SG18x100	right	SLWS-2080 ▶ page 1041
SWZ-W-208007	New!	SG18x100	left	SLWS-2080 ▶ page 1041

drylin® Lead Screw Drives | Product Range

Split lead screw nuts, made from iglidur® J



Order key

JTRM-2230TR10x2

- Thread
- b1
- d2
- Metric
- Hand of rotation
- Trapezoidal thread
- Material iglidur® J

Technical Data

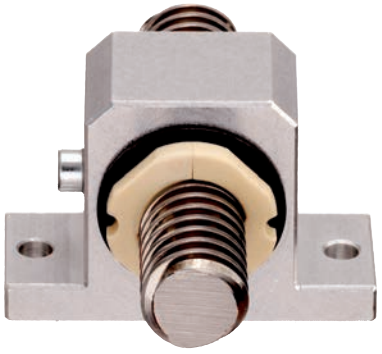
Part number		Max. load axial static* [N]	Max. load axial static** [N]
JTRM-2230TR10x2	New!	300	500
JTRM-3240TR20x4	New!	1,000	1,500
JTRM-3240TR20x8P4	New!	1,000	1,500

Dimensions [mm]

Part number		b	b1	d1	d2	ds	k	r	s
JTRM-2230TR10x2	New!	30	22.6	TR10x2	22	20.5	7	1.5	1.3
JTRM-3240TR20x4	New!	40	31.2	TR20x4	32	29.6	8	2.5	1.6
JTRM-3240TR20x8P4	New!	40	31.2	TR20x8P4	32	29.6	8	2.5	1.6

* Secured in housing by radially inserted nut DIN934

** Secured in housing by circlips, DIN471



also available with housing block

Combination: lead screw nut with housing block

Part number
RGAS-JTRM-20x8P4
RGAS-JTRM-20x4
RGAS-JTRM-10x2

delivery time from stock

€ prices price list online
www.igus.co.uk/en/jtrm

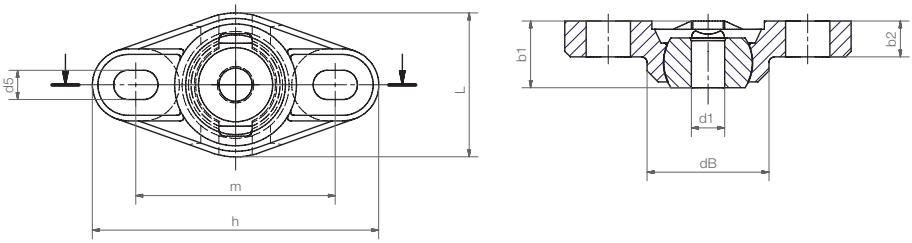
drylin® Lead Screw Drives | Product Range

Spherical trapezoidal lead screw nut with ball

Order key

JFRKM-EFOM-TR8x1.5

- Thread
- Housing
- Metric
- Series K
- Hand of rotation
- Type F = with flange
- Material iglidur® J



Dimensions [mm]

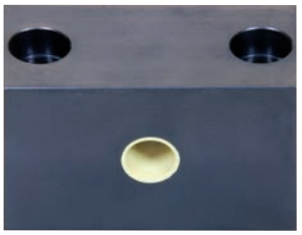
Part number	Effective supporting surface [mm²]	d1	h	L	b1	b2	m	dB	d5	Thread d1 x P	max. stat. F axial [N]
JFRKM-EFOM-TR8x1.5 New!	102	8	52	26	12	6.5	36	22.2	5.3x8	TR8x1.5	100
JFRKM-EFOM-TR10x2 New!	127	10	52	26	12	6.5	36	22.2	5.3x8	TR10x2	100
JFRKM-EFOM-TR10x3 New!	120	10	52	26	12	6.5	36	22.2	5.3x8	TR10x3	100

delivery time from stock

prices price list online
www.igus.co.uk/en/jfrkm

drylin® Lead Screw Drives | Product Range

Lead screw support blocks



Order key

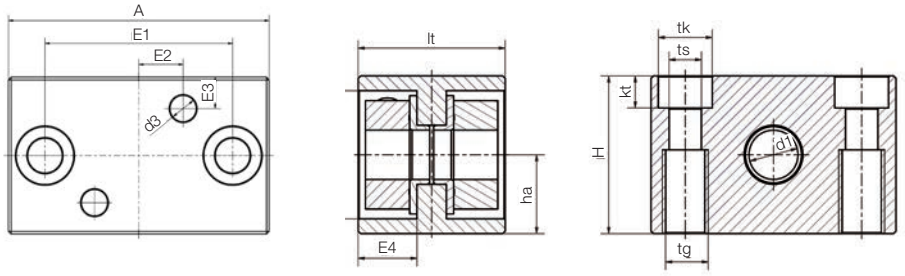
SLS-10x2-LL

- LL: Fixed bearing
- FL: Floating bearing
- Lead
- Marking

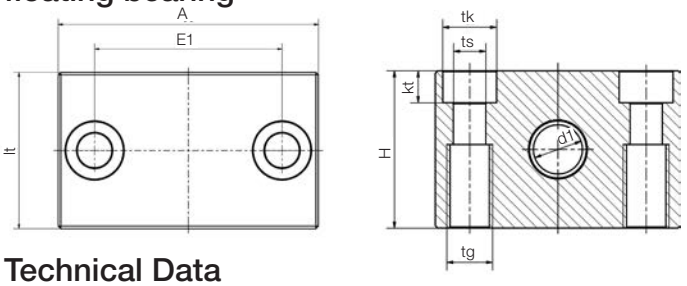
drylin® E compatible

▶ Page 1089

fixed bearing



floating bearing



Technical Data

Part number	Weight [g]	Max. stat. load capacity axial [N]
SLS-10x2-LL	115	–
SLS-10x2-FL	88	700
SLS-18x4-LL	295	–
SLS-18x4-FL	205	1,600
SLS-24x5-LL	725	–
SLS-24x5-FL	525	2,500

Dimensions [mm]

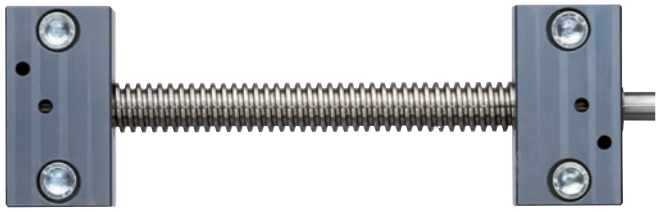
Part number	A	H	E1	E2	E3	E4	lt	tk	ts	tg	kt	d1	d3	ha
SLS-10x2-LL	50	32	36	–	–	–	30	11	6.6	M8	6.5	10	–	16
SLS-10x2-FL	50	32	36	8.5	6	12	30	11	6.6	M8	6.5	10	5	16
SLS-18x4-LL	72	46	54	–	–	–	36	15	9	M10	8.6	12*	–	23
SLS-18x4-FL	72	46	54	13.5	8	15	36	15	9	M10	8.6	18	6.6	23
SLS-24x5-LL	94	64	70	–	–	–	50	20	13.5	M16	13	14*	–	32
SLS-24x5-FL	94	64	70	17.5	7.5	17	50	20	13.5	M16	13	24	8	32

Scope of delivery: anodized support block with clamp rings (fixed side) and plain bearings (fixed and floating side)

* The floating support blocks for TR18x4 and TR24x5 require a machined end on the lead screw (see trapezoidal lead screw with machined end on page 959)

drylin® Lead Screw Drives | Product Range

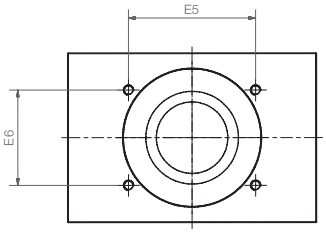
Lead screw support with ball bearings

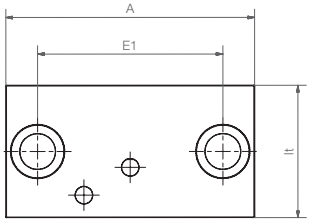


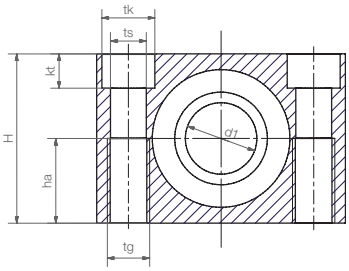
Order key

SLS-10x2-BB

- Ball Bearing
- Lead
- Marking







drylin® E compatible

▶ Page 1089

Technical Data

Part number	Weight [g]	Max. stat. load capacity axial [N]
SLS-10x2-BB	110	350
SLS-18x4-BB	265	1,000
SLS-24x5-BB	350	1,500

Dimensions [mm]

Part number		A	H	E1	E5	E6	lt	tk	ts	tg	kt	d1	ha
SLS-10x2-BB	New!	50	32	36	40	20	30	11	6.6	M8	6.5	10	16
SLS-18x4-BB	New!	72	46	54	48	36	36	15	9	M10	8.6	18	23
SLS-24x5-BB	New!	94	64	70	48	36	50	20	13.5	M12	13	24	32

delivery time: from stock

prices: price list online www.igus.co.uk/en/sls

drylin® Lead Screw Drives | Product Range

Quick-release nut – Fast forward

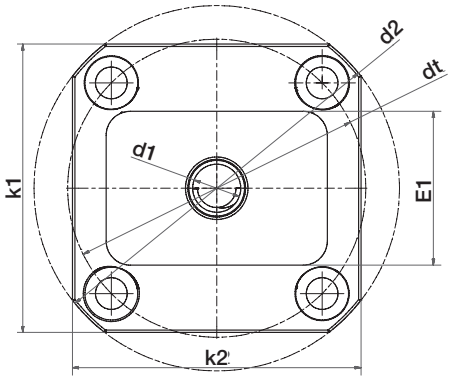
Order key

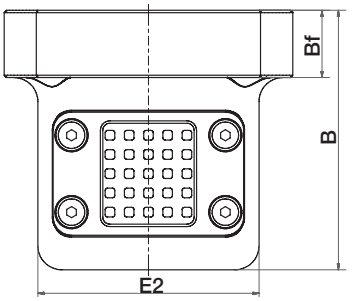
FTRM-FF-10x2

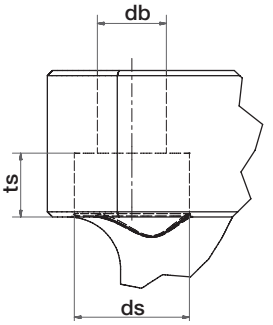
- Thread
- Fast Forward
- Metric
- Hand of rotation
- Trapezoidal thread
- With flange

Fast forward mechanism: A combination of accurate positioning and quick manual adjustment with trapezoidal lead screw nuts.

- For quick format adjustments
- incl. brake by means of self-locking thread design
- Lubricant-free
- Housing: AL anodized, leadscrew nut made from iglidur® J
- Tough and reliable
- only recommended for horizontal applications
- Max. axial load stat.: 200 N, dyn.: 50 N
  see SHT-FF ▶ **page 1029**



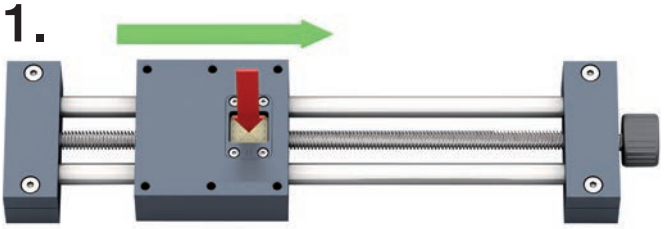




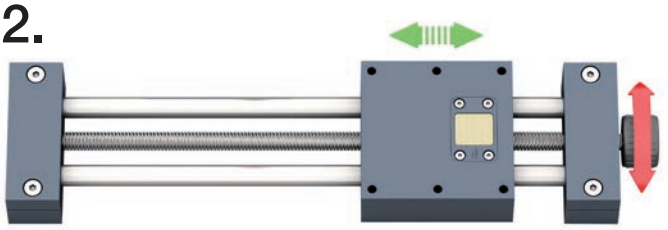
Dimensions [mm]

Part number	d1	d2	dt	B	Bf	ts	db	ds	k1	k2	E1	E2
FTRM-FF-10x2	TR-10x2	76	62	54	14	6.1	6.6	11	60	60	32	46

1.



2.



press > disengage > move manually > click into place > fine-tuning

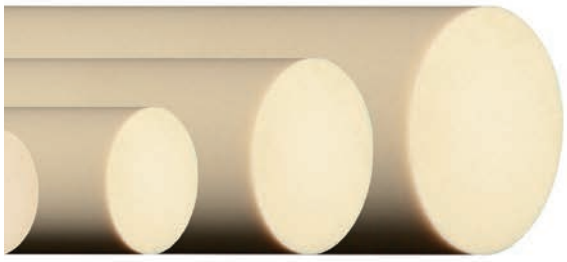
delivery time from stock

prices price list online
www.igus.co.uk/en/ftrm-ff

drylin® Lead Screw Drives | Product Range

iglidur® bar stock ▶ page 609

drylin® lead screw nuts are typically machined from solid billets. The machining process is able to conveniently produce maintenance-free lead screw nuts to your required dimensions. For prototypes, test samples and mass production requirements.



Order key

SFRJ-1000-500

- Length*
- Inner-Ø
- 00: solid
- Outer-Ø
- Material iglidur® J
- Type, round
- iglidur® bar stock

Part number		Dimensions [mm] Ø	Material
iglidur® J – General purpose, good wear-resistance and low friction			
SFRJ-1000-□*		10	iglidur® J
SFRJ-2000-□*		20	iglidur® J
SFRJ-3000-□*		30	iglidur® J
SFRJ-4000-□*		40	iglidur® J
SFRJ-5000-□*		50	iglidur® J
SFRJ-6000-□*		60	iglidur® J
SFRJ-8000-□*		80	iglidur® J
SFRJ-10000-□*		100	iglidur® J
iglidur® W300 – Material for high load requirements			
SFRW-3000-□*		30	iglidur® W300
SFRW-6000-□*		60	iglidur® W300
iglidur® A180 – General purpose for medical and food industry (FDA compliant)			
SFRA180-1000-□*		10	iglidur® A180
SFRA180-2000-□*		20	iglidur® A180
SFRA180-3000-□*		30	iglidur® A180
SFRA180-4000-□*		40	iglidur® A180
SFRA180-5000-□*		50	iglidur® A180
SFRA180-6000-□*		60	iglidur® A180
SFRA180-8000-□*		80	iglidur® A180
SFRA180-10000-□*		100	iglidur® A180
iglidur® J350 – High-temperature material			
SFRJ350-3000-□*		30	iglidur® J350
SFRJ350-4000-□*	New!	40	iglidur® J350
SFRJ350-5000-□*	New!	50	iglidur® J350
SFRJ350-6000-□*	New!	60	iglidur® J350

Part number		Dimensions [mm] Ø	Material
iglidur® J4 – Wear resistant and cost-effective			
SFRJ4-2000-□*		20	iglidur® J4
SFRJ4-3000-□*		30	iglidur® J4
SFRJ4-4000-□*		40	iglidur® J4
SFRJ4-5000-□*		50	iglidur® J4
SFRJ4-6000-□*		60	iglidur® J4
iglidur® P210 – Material for high speeds at low loads			
SFRP210-3000-□*		30	iglidur® P210
SFRP210-4000-□*	New!	40	iglidur® P210
SFRP210-5000-□*	New!	50	iglidur® P210
SFRP210-6000-□*	New!	60	iglidur® P210
iglidur® A350 – High-temperature material for medical and food industry (FDA compliant)			
SFRA350-3000-□*		30	iglidur® A350
SFRA350-4000-□*	New!	40	iglidur® A350
SFRA350-5000-□*	New!	50	iglidur® A350
SFRA350-6000-□*	New!	60	iglidur® A350
iglidur® T220 – Material for tobacco applications			
SFRT220-3000-□*	New!	30	iglidur® T220
SFRT220-4000-□*	New!	40	iglidur® T220
SFRT220-5000-□*	New!	50	iglidur® T220
SFRT220-6000-□*	New!	60	iglidur® T220
iglidur® X – Chemical-resistant high-temperature material			
SFRX-3000-□*	New!	30	iglidur® X

*Length in mm from 100 to 1000 graduated in 100 mm steps

My Sketches