

Data sheet drylin® drive technology

Content:

Linear Module SLW-1660

SLW-1660-DS14X4

SLW-1660-DS14X25

SLW-1660-DS14X30

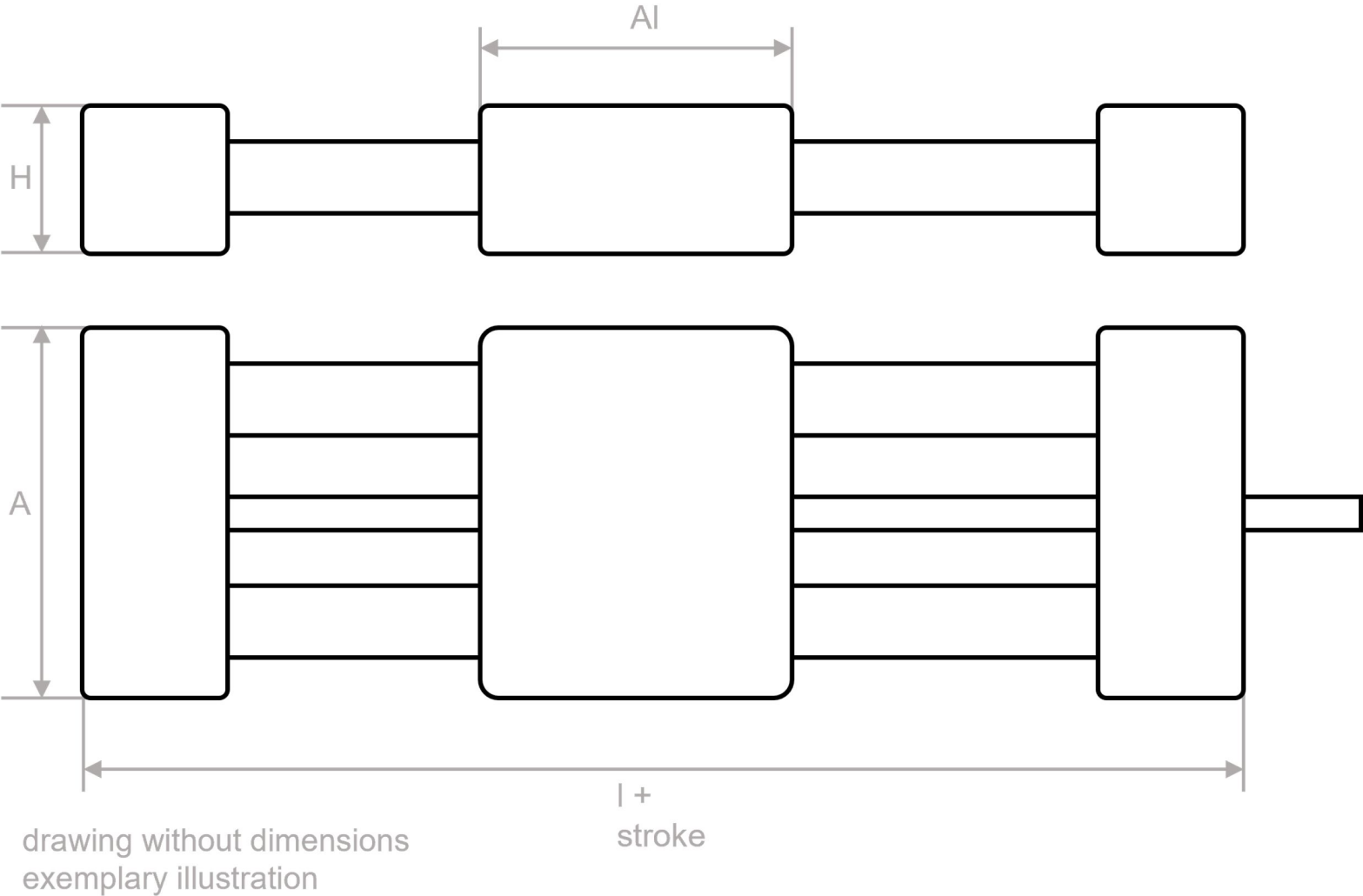
SLW-1660-DS14X40.6

SLW-1660-TR14X3

SLW-1660-TR14X4

Reading example

Disclaimer



Linear Module SLW-1660

SLW-1660-DS14X4

Diagram 1: Stroke / speed

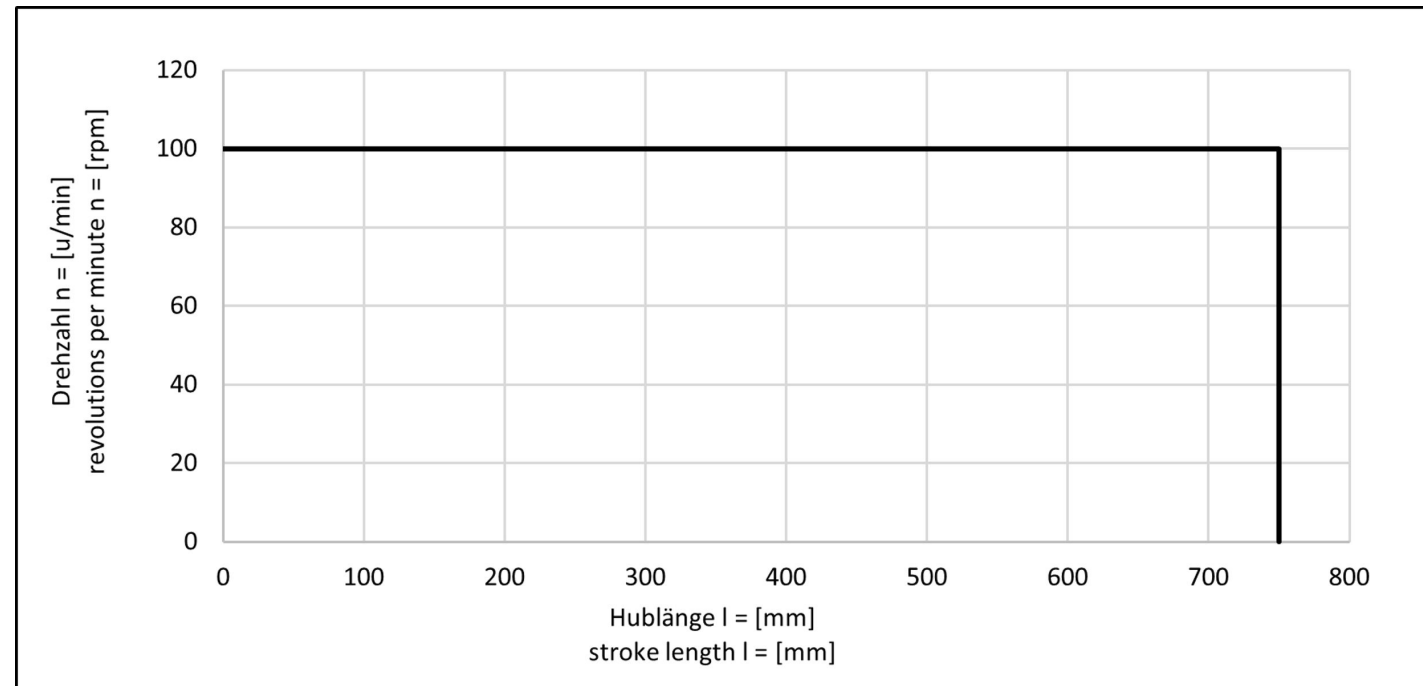
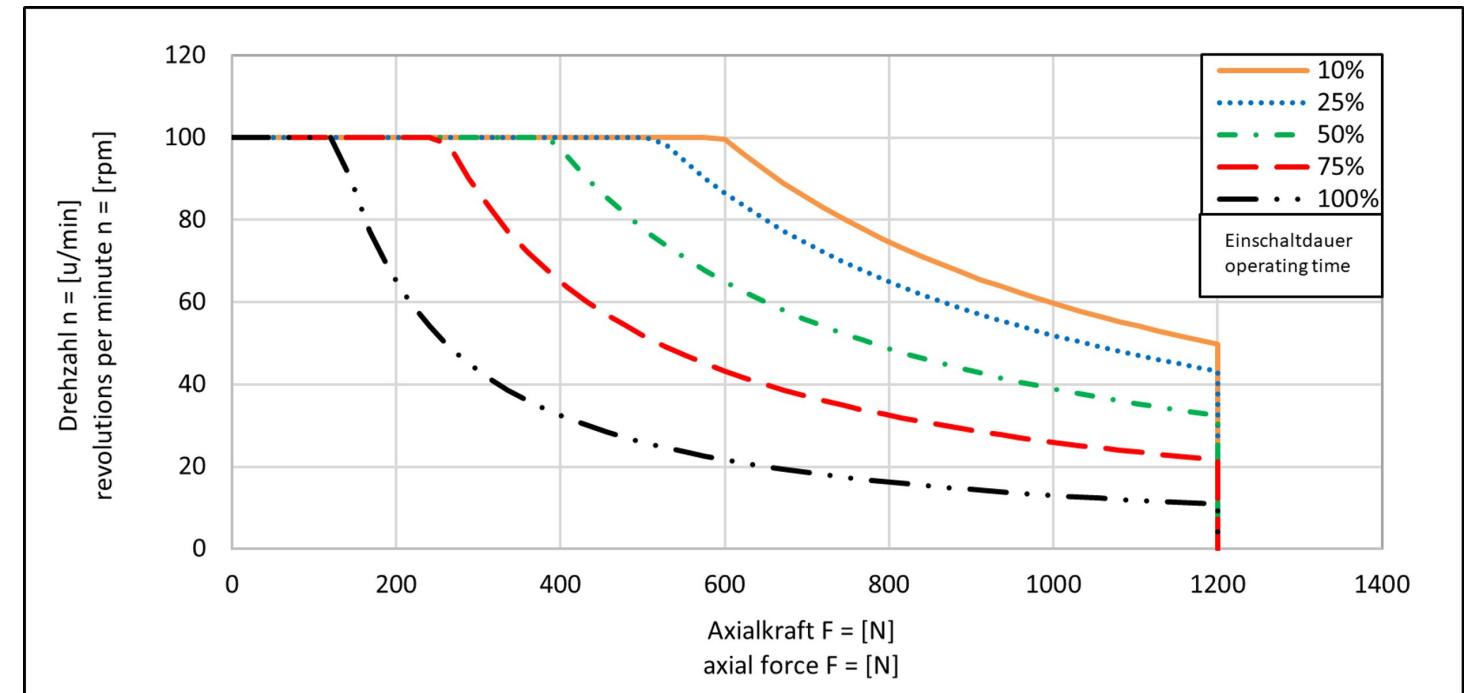


Diagram 2: Axial force / speed



Thread size: DS14X4
 Stroke [mm]: 100; lead screw support: GL
 Nut length [mm]: 20 mm

Technical data

Thread size	max. perm. speed [1/min] ²	max. perm. drive torque [Nm] ²	max. perm. radial load ²	max. perm. axial force [N] ²	Wear limit linear bearing [mm]	Wear limit linear axial bearing [mm]	Wear limit nut [mm]
DS14x4	100	5	4800	1200	0.5	0.5	0.76

Dimensions and weight

Carriage Length Al [mm]	Width (A) x Height (H) x Length (L+Stroke) [mm]	Maximum permissible stroke [mm] ³	Base weight aluminium [kg]	Additional weight aluminium [kg/100mm]
36	104 x 37 x 86	750	0.85	0.32
100	104 x 37 x 150	750	1.49	0.32
150	104 x 37 x 200	700	1.76	0.32
200	104 x 37 x 250	650	2.02	0.32
250	104 x 37 x 300	600	2.28	0.32

²Maximum values! These values are maximum values and apply only to one criterion. Combined load data can be found in the diagrams. In addition, these speed and load data only apply to the linear bearing and threaded nut material iglidur® J

³A deviating stroke length affects the load data

Linear Module SLW-1660

SLW-1660-DS14X25

Diagram 1: Stroke / speed

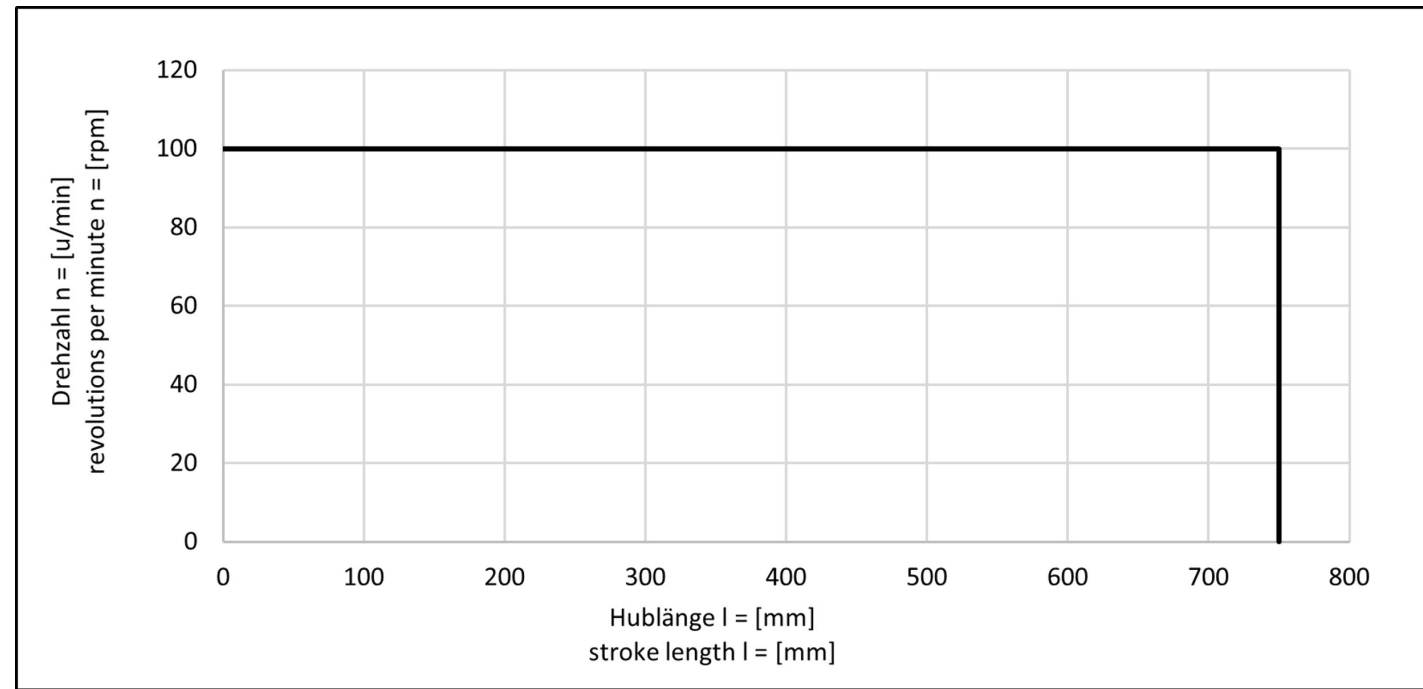
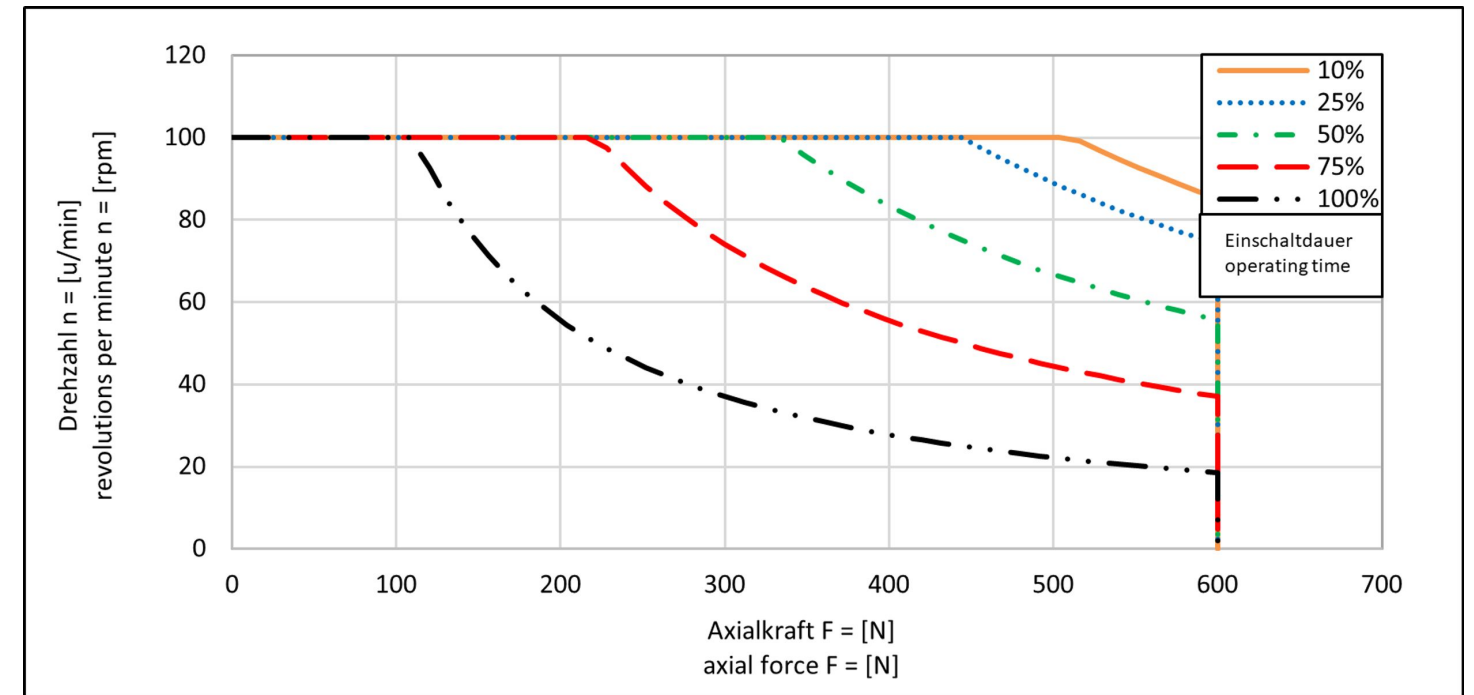


Diagram 2: Axial force / speed



Thread size: DS14X25
 Stroke [mm]: 100; lead screw support: GL
 Nut length [mm]: 20 mm

Technical data

Thread size	max. perm. speed [1/min] ²	max. perm. drive torque [Nm] ²	max. perm. radial load ²	max. perm. axial force [N] ²	Wear limit linear bearing [mm]	Wear limit linear axial bearing [mm]	Wear limit nut [mm]
DS14x25	100	5.1	2400	600	0.5	0.5	0.94

Dimensions and weight

Carriage Length Al [mm]	Width (A) x Height (H) x Length (L+Stroke) [mm]	Maximum permissible stroke [mm] ³	Base weight aluminium [kg]	Additional weight aluminium [kg/100mm]
36	104 x 37 x 86	750	0.85	0.32
100	104 x 37 x 150	750	1.49	0.32
150	104 x 37 x 200	700	1.76	0.32
200	104 x 37 x 250	650	2.02	0.32
250	104 x 37 x 300	600	2.28	0.32

²Maximum values! These values are maximum values and apply only to one criterion. Combined load data can be found in the diagrams. In addition, these speed and load data only apply to the linear bearing and threaded nut material iglidur® J
³A deviating stroke length affects the load data

Linear Module SLW-1660

SLW-1660-DS14X30

Diagram 1: Stroke / speed

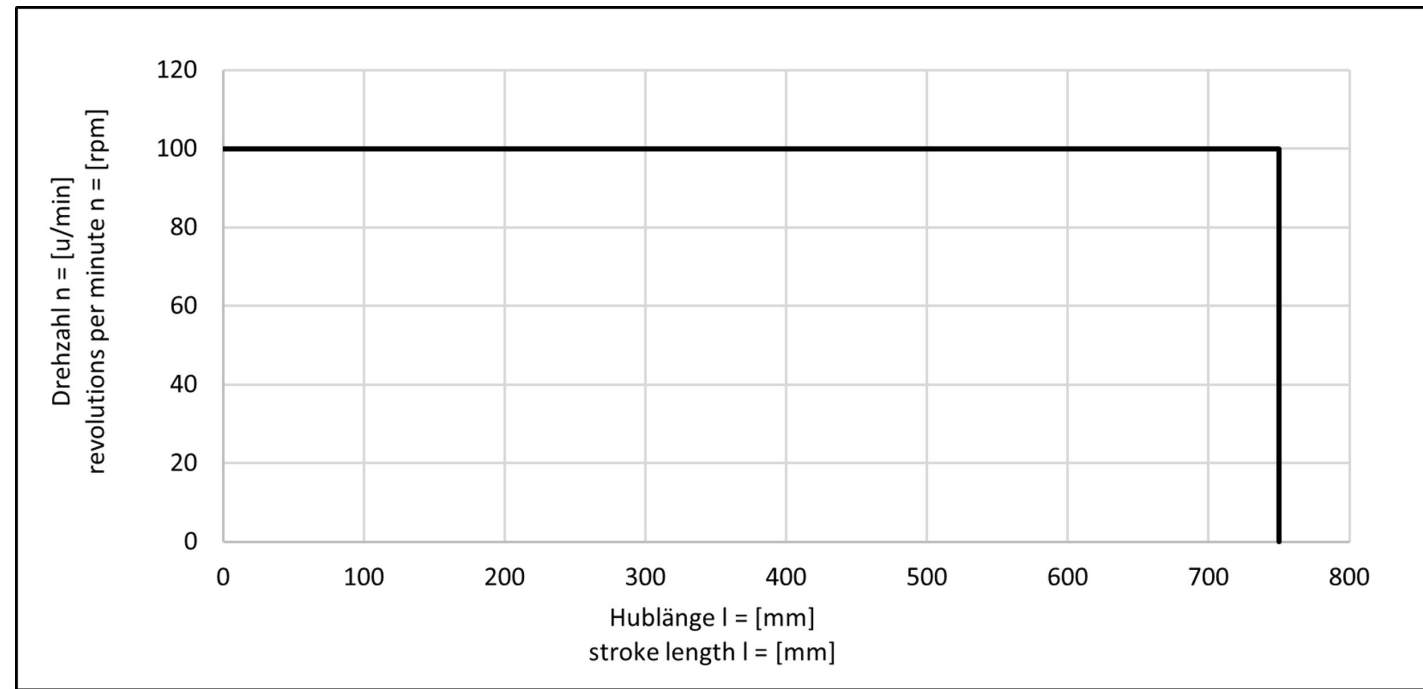
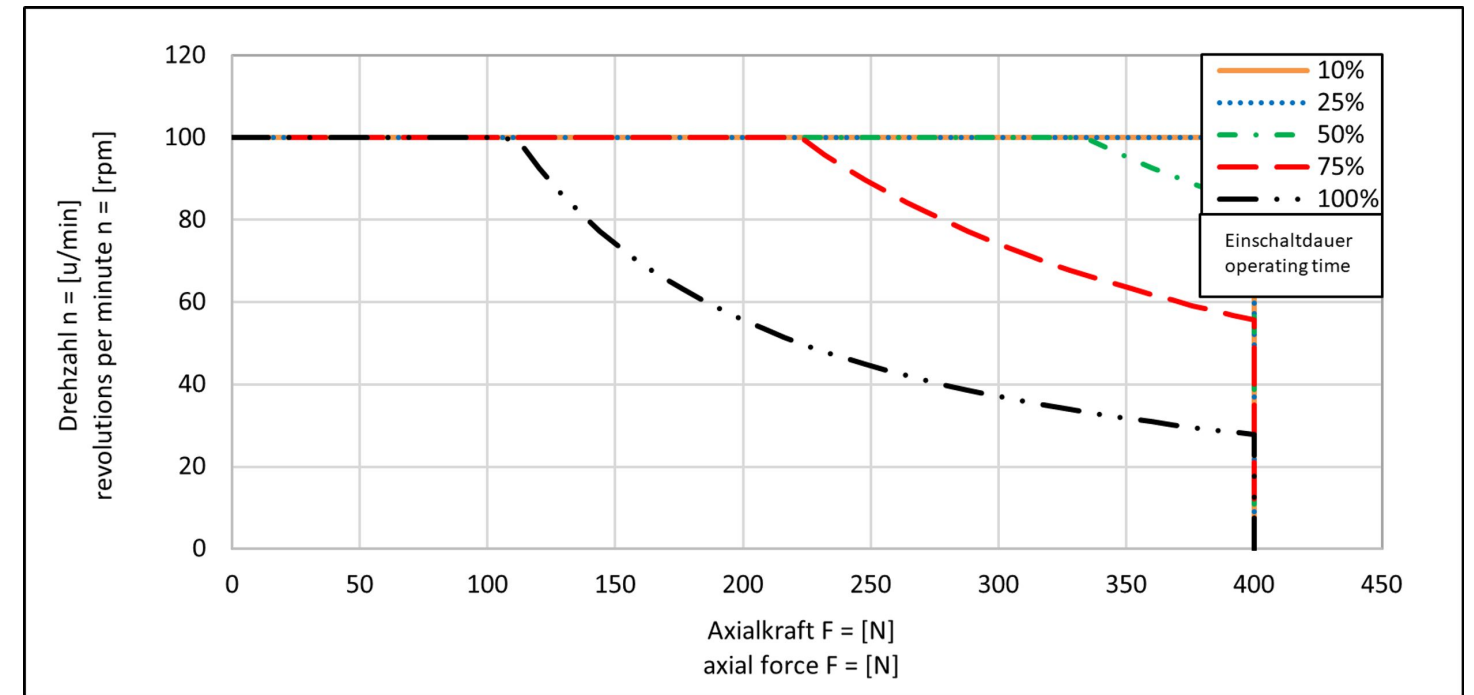


Diagram 2: Axial force / speed



Thread size: DS14X30
 Stroke [mm]: 100; lead screw support: GL
 Nut length [mm]: 20 mm

Technical data

Thread size	max. perm. speed [1/min] ²	max. perm. drive torque [Nm] ²	max. perm. radial load ²	max. perm. axial force [N] ²	Wear limit linear bearing [mm]	Wear limit linear axial bearing [mm]	Wear limit nut [mm]
DS14x30	100	3.9	1600	400	0.5	0.5	0.94

Dimensions and weight

Carriage Length Al [mm]	Width (A) x Height (H) x Length (L+Stroke) [mm]	Maximum permissible stroke [mm] ³	Base weight aluminium [kg]	Additional weight aluminium [kg/100mm]
36	104 x 37 x 86	750	0.85	0.32
100	104 x 37 x 150	750	1.49	0.32
150	104 x 37 x 200	700	1.76	0.32
200	104 x 37 x 250	650	2.02	0.32
250	104 x 37 x 300	600	2.28	0.32

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³A deviating stroke length affects the load data

Linear Module SLW-1660

SLW-1660-DS14X40.6

Diagram 1: Stroke / speed

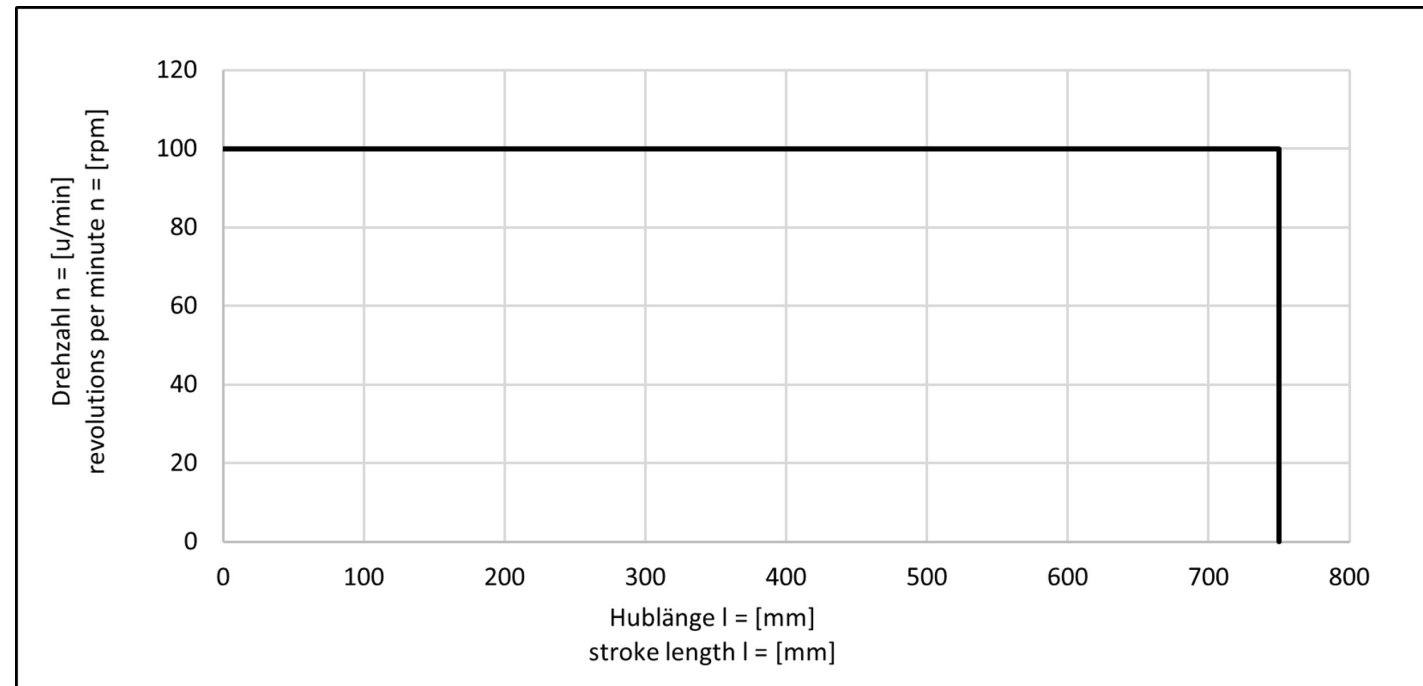
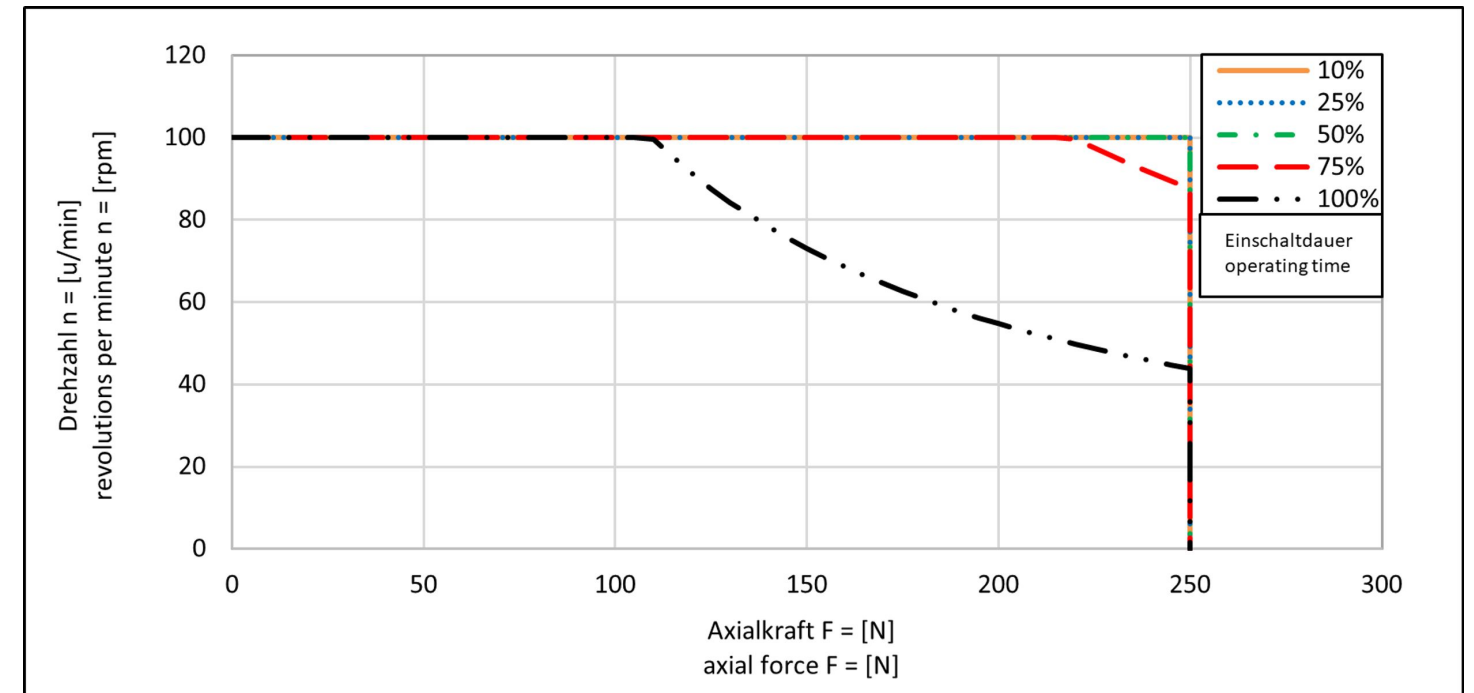


Diagram 2: Axial force / speed



Thread size: DS14X40.6
 Stroke [mm]: 100; lead screw support: GL
 Nut length [mm]: 20 mm

Technical data

Thread size	max. perm. speed [1/min] ²	max. perm. drive torque [Nm] ²	max. perm. radial load ²	max. perm. axial force [N] ²	Wear limit linear bearing [mm]	Wear limit linear axial bearing [mm]	Wear limit nut [mm]
DS14x40,6	100	3.2	1000	250	0.5	0.5	0.94
DS14x40,6	100	3.3	1000	250	0.5	0.5	0.94

Dimensions and weight

Carriage Length Al [mm]	Width (A) x Height (H) x Length (L+Stroke) [mm]	Maximum permissible stroke [mm] ³	Base weight aluminium [kg]	Additional weight aluminium [kg/100mm]
36	104 x 37 x 86	750	0.85	0.32
100	104 x 37 x 150	750	1.49	0.32
150	104 x 37 x 200	700	1.76	0.32
200	104 x 37 x 250	650	2.02	0.32
250	104 x 37 x 300	600	2.28	0.32

²Maximum values! These values are maximum values and apply only to one criterion. Combined load data can be found in the diagrams. In addition, these speed and load data only apply to the linear bearing and threaded nut material iglidur® J

³A deviating stroke length affects the load data

Linear Module SLW-1660

SLW-1660-TR14X3

Diagram 1: Stroke / speed

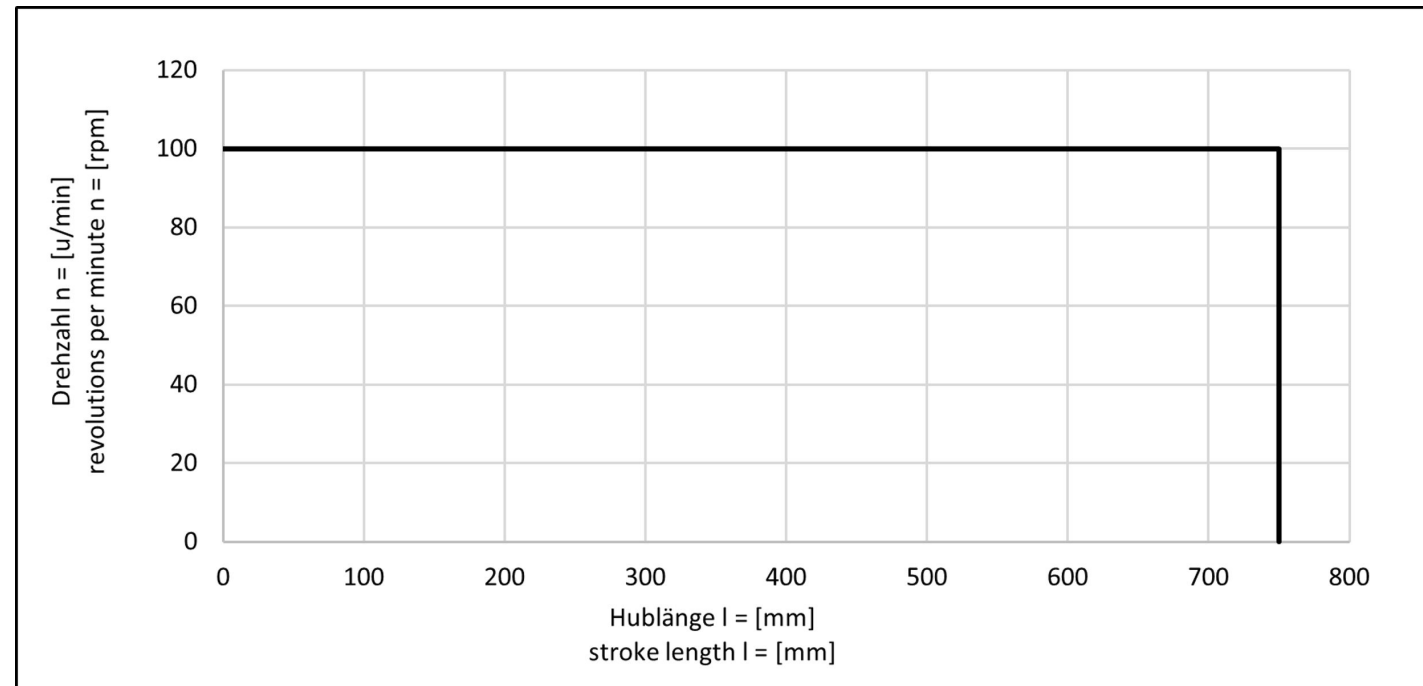
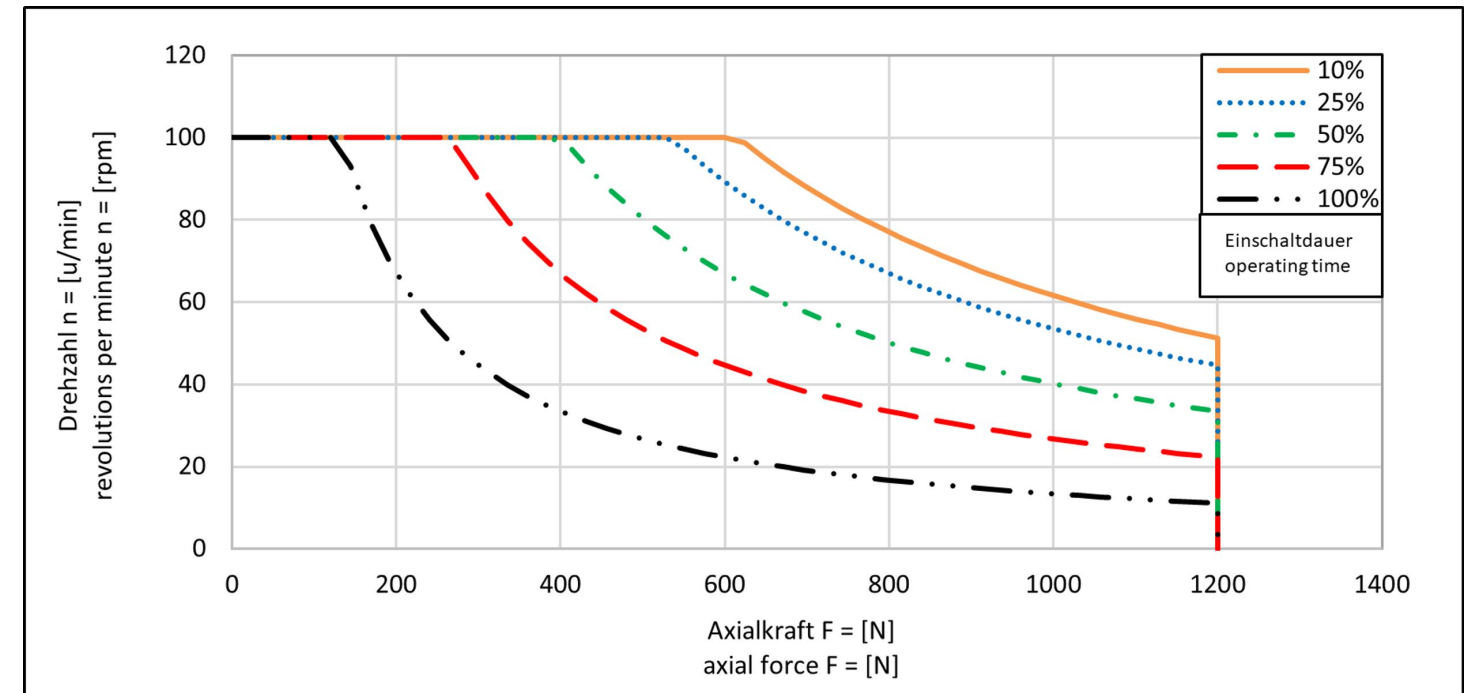


Diagram 2: Axial force / speed



Thread size: TR14X3
 Stroke [mm]: 100; lead screw support: GL
 Nut length [mm]: 20 mm

Technical data

Thread size	max. perm. speed [1/min] ²	max. perm. drive torque [Nm] ²	max. perm. radial load ²	max. perm. axial force [N] ²	Wear limit linear bearing [mm]	Wear limit linear axial bearing [mm]	Wear limit nut [mm]
TR14X3	100	4.8	4800	1200	0.5	0.5	0.5

Dimensions and weight

Carriage Length Al [mm]	Width (A) x Height (H) x Length (L+Stroke) [mm]	Maximum permissible stroke [mm] ³	Base weight aluminium [kg]	Additional weight aluminium [kg/100mm]
36	104 x 37 x 86	750	0.85	0.32
100	104 x 37 x 150	750	1.49	0.32
150	104 x 37 x 200	700	1.76	0.32
200	104 x 37 x 250	650	2.02	0.32
250	104 x 37 x 300	600	2.28	0.32

²Maximum values! These values are maximum values and apply only to one criterion. Combined load data can be found in the diagrams. In addition, these speed and load data only apply to the linear bearing and threaded nut material iglidur® J
³A deviating stroke length affects the load data

Linear Module SLW-1660

SLW-1660-TR14X4

Diagram 1: Stroke / speed

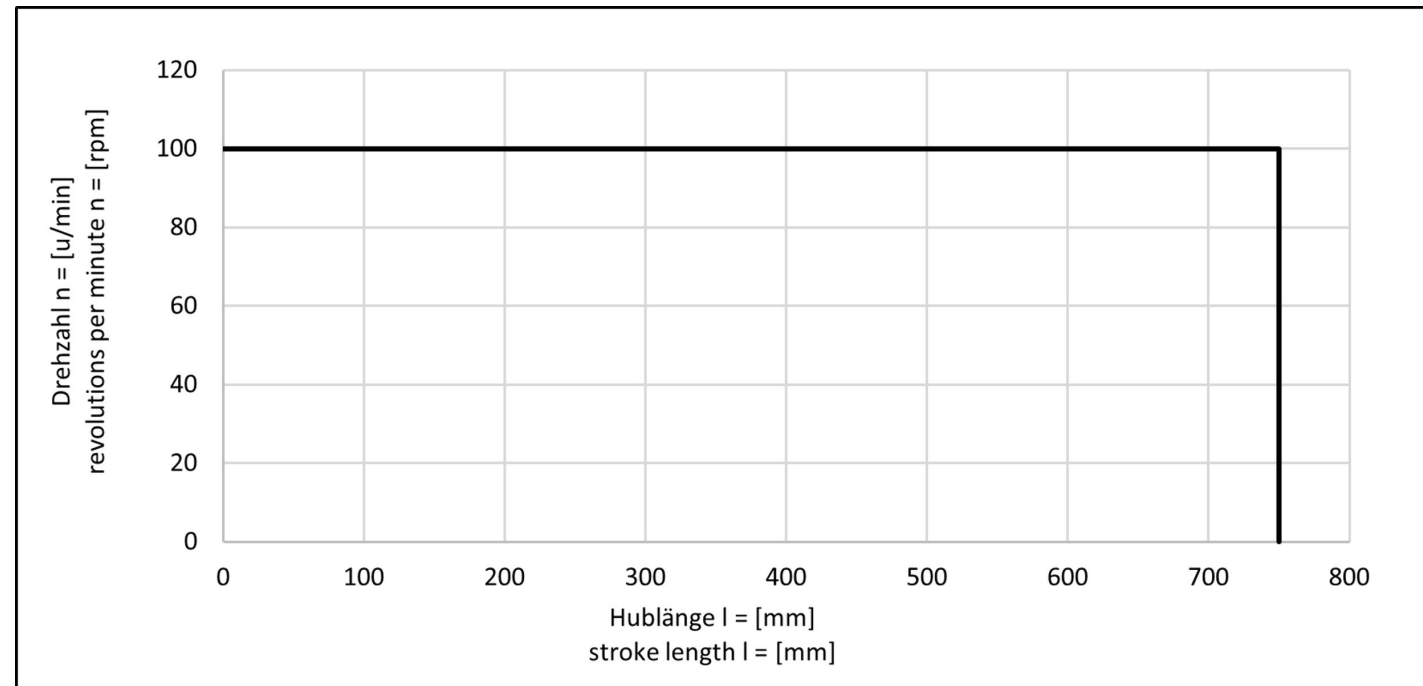
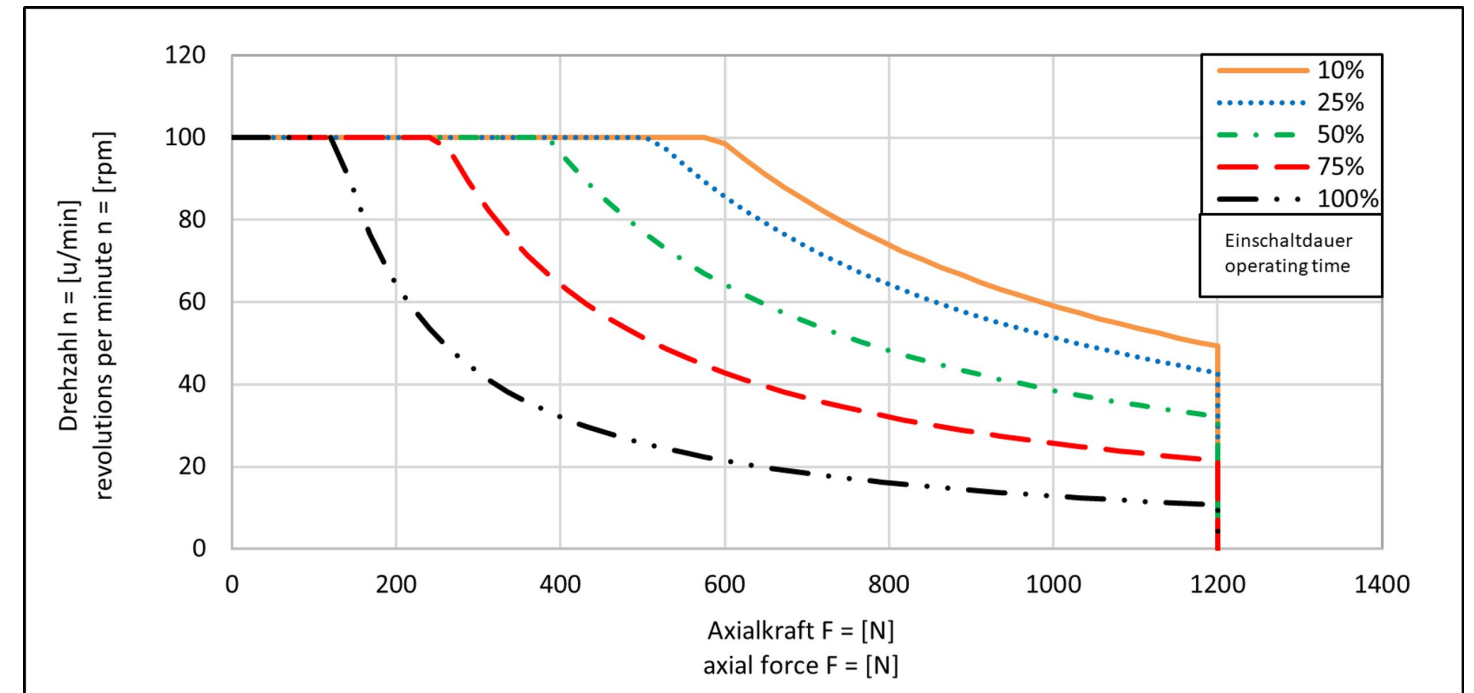


Diagram 2: Axial force / speed



Thread size: TR14X4
 Stroke [mm]: 100; lead screw support: GL
 Nut length [mm]: 20 mm

Technical data

Thread size	max. perm. speed [1/min] ²	max. perm. drive torque [Nm] ²	max. perm. radial load ²	max. perm. axial force [N] ²	Wear limit linear bearing [mm]	Wear limit linear axial bearing [mm]	Wear limit nut [mm]
TR14X4	100	5	4800	1200	0.5	0.5	0.67

Dimensions and weight

Carriage Length Al [mm]	Width (A) x Height (H) x Length (L+Stroke) [mm]	Maximum permissible stroke [mm] ³	Base weight aluminium [kg]	Additional weight aluminium [kg/100mm]
36	104 x 37 x 86	750	0.85	0.32
100	104 x 37 x 150	750	1.49	0.32
150	104 x 37 x 200	700	1.76	0.32
200	104 x 37 x 250	650	2.02	0.32
250	104 x 37 x 300	600	2.28	0.32

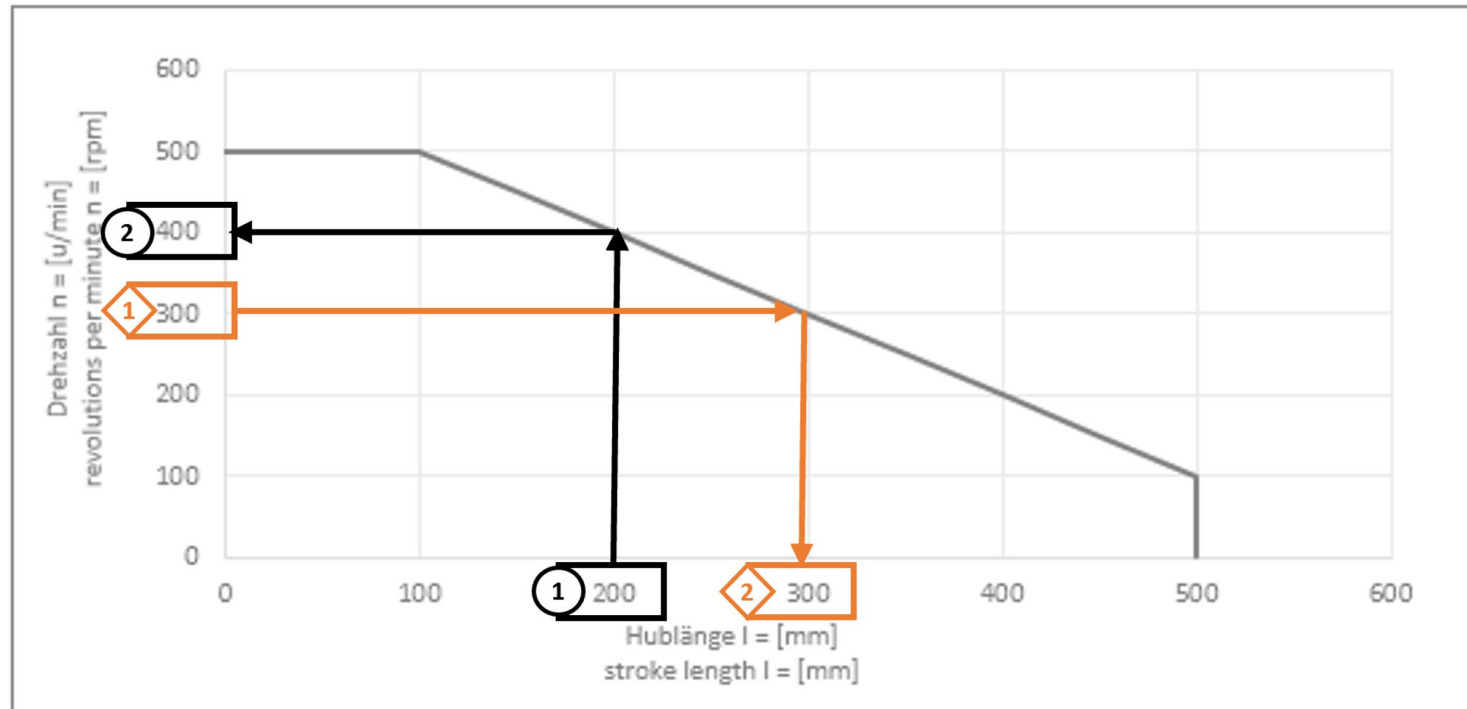
²Maximum values! These values are maximum values and apply only to one criterion. Combined load data can be found in the diagrams. In addition, these speed and load data only apply to the linear bearing and threaded nut material iglidur® J

³A deviating stroke length affects the load data

Reading example

Linear Module SLW-1660

Reading example diagram 1: Stroke / speed



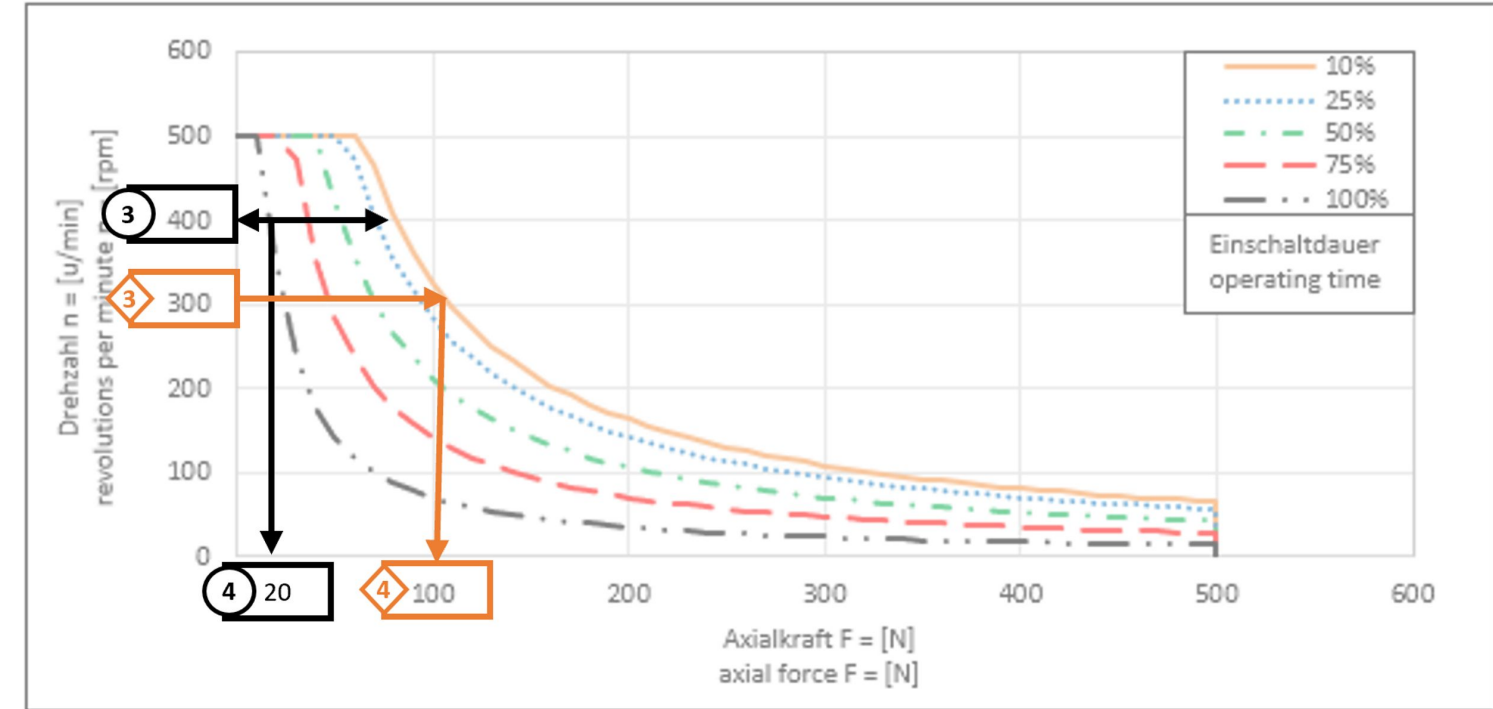
Example 1 (black): available stroke = 200 mm

Based on the existing stroke length ① the permissible speed can be determined. ②

At 200 mm stroke ① a permissible speed of 400 U/min ② can be determined.

Based on the permissible rotational speed ③, the permissible axial force ④ can be read as a function of the duty cycle (diagram legend). abgelesen werden. With a duty cycle of 100% and a speed of 400 U/min ③ a permissible axial force of 20 N ④ can be determined.

Reading example diagram 2: Axial force / speed



Example 2 (orange): rotational speed = 300 rpm

Dependent on the required speed ① the permissible stroke ② can be determined. At a speed of 300 rpm ① a permissible stroke length of 300 mm ② can be determined.

Based on the speed ③ the permissible axial force ④ can be read as a function of the duty cycle (diagram legend). With a duty cycle of 10% and a speed of 300 rpm ③ a permissible axial force of 100 N ④ can be determined.

Hint!

The diagram 2: Axial force / speed only refers to stroke lengths ≤ 100mm. For stroke lengths > 100mm, the max. permissible axial force can be increased with a correction factor. The limit values from the table of technical data must not be exceeded.

Calculation example:

$$F_k = F_{zul} * (0.008 * \text{stroke length} + 0.2)$$

$$F_k = 20 \text{ N} * (0.008 * 200 + 0.2) = 36 \text{ N}$$

The corrected force can be used with the previously determined stroke-dependent speed.

Disclaimer

The preceding information is the result of tests carried out. None of the information comprises one or more guarantees on certain properties nor does it comprise one or more guarantees in respect of the suitability of a product for a specific purpose, since the tests were carried out under laboratory conditions. A guarantee on certain product properties and/or their suitability for specific use is to be made in writing in the order confirmation. Since the results have been gained under laboratory conditions, which are almost never able to simulate real application-conditions, we recommend application-specific measurements under real application conditions.