

drylin[®] general drive technology – SLN/SLNV linear modules

Based on lubrication-free
drylin[®] N low-profile linear guide

Drive: Trapezoidal or high helix lead screw

Compact design

Clearance adjustment on carriage

Precise with pre-load



Compact, precise and lubrication-free


Lubrication-free miniature linear modules – drylin® SLN


drylin® SLN linear axes is a compact solution. The axis measures 28 x 22mm and can be configured with stroke lengths of up to 250mm. Thanks to the lubrication-free plastic sliders, it is quiet and very light. The axis is based on the tried-and-tested drylin® N system, size 27. It is available both mounted on plain bearings or on ball bearings in the shaft end supports. The drylin® SLN linear axis can be adjusted manually using the hand wheel or combined with the drylin® stepper and DC motors.


- Ultra-compact design
- 3 carriage types (basic/adjustable/pre-load)
- Lubrication-free drylin® low-profile linear guide
- Modular design

Typical application areas

- Sensors
- Inspection technology
- Laboratory technology
- Medical technology

 **Available in 3–8 days**
Detailed information about delivery time online.

 **Price breaks online**
No minimum order value. No minimum order quantity.

 **Carriage length: 35mm**
Stroke lengths: up to 250mm

 **Product finder**
▶ www.igus.eu/sln-productfinder

Shaft end supports made from corrosion-resistant, robust plastic

Lead screw mounted with plain or ball bearings

Cost-effective, robust plastic carriages (basic series 03)

Carriage with manual height clearance adjustment (standard series 04)

Metal thread inserts

Minimal backlash with pre-load (pre-load series 05)

Rail made from anodised aluminium

Lead screws made from stainless steel with pitch M5 (5x0.8mm) or high helix thread (5x5, 6x12.7)

Hand wheel available
▶ [Page 1511](#)

Configurable with motor as a ready-to-install linear drive



Miniature linear module, pre-load version

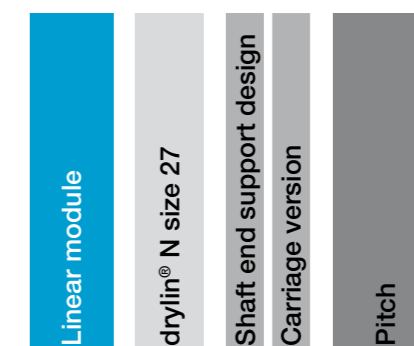


- Based on maintenance-free drylin® N low-profile linear guides size 27
- BB version (ball bearing) for low backlash run
- Manual and motorised operation possible
- Linear carriage with individual height clearance adjustment and pre-load (optional)
- Available accessories
▶ [Page 1503](#)
- Also see econ chapter
▶ [Page 1460](#)
- Available with motor

 **Order key**

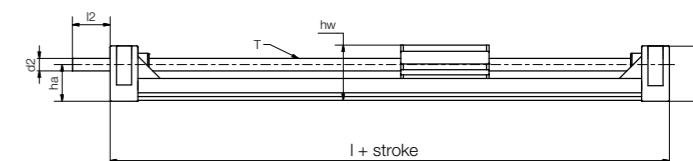
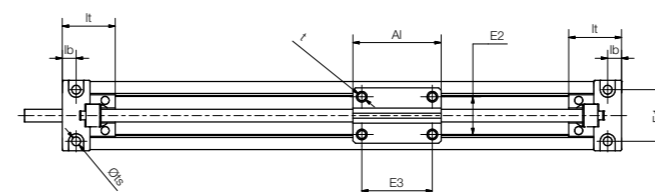
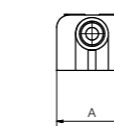
Order example

SLN- 27 - 1 4 - 0008



Options:

Shaft end support design	Pitch
0 = Plain bearing	0008 = M5x0.8
1 = Ball bearing	0050 = Sg5x5
Carriage version	0008 = Ds6.35x2.54
4 = Standard, adjustable	0127 = Sg6.35x12.7
5 = Standard, pre-load	0254 = Ds6.35x25.4



Technical data

Part No.	Max. stroke length ¹⁰¹⁾ [mm]	Weight [kg]	Additional [kg] (per 100mm)	Max. static load capacity		Max. speed [rpm]	Max. drive torque [Nm]
				Axial [N]	radial [N]		
SLN-27-04	250	0.06	0.04	10	40	100	0.1
SLN-27-05	250	0.06	0.04	10	40	100	0.1
SLN-27-14	250	0.06	0.04	10	40	300	0.1
SLN-27-15	250	0.06	0.04	10	40	300	0.1

Dimensions [mm]

Part No.	A	A1	H	E1	E2	E3	E11 ¹⁰²⁾	I	hw	It	Ib	ts	d2 ⁹⁸⁾	I2	ha
	±0.2	-0.1	±0.2	±0.15	±0.15	±0.15			±0.2	±0.2			Ø		
SLN-27-04	28	35	22	20.5	15	28	15	77	22.5	21	5	3.5	5 (4 h7)	15	14.5
SLN-27-05	28	35	22	20.5	15	28	15	77	22.5	21	5	3.5	5 (4 h7)	15	14.5
SLN-27-14	28	35	22	20.5	15	28	15	77	22.5	21	5	3.5	Ø 4h9 ⁹⁸⁾	15	14.5
SLN-27-15	28	35	22	20.5	15	28	15	77	22.5	21	5	3.5	Ø 4h9 ⁹⁸⁾	15	14.5

¹⁰¹⁾ Fixed stroke lengths for SLN option with ball bearings: 100/150/200/250mm

¹⁰²⁾ The dimension E11 can only be found in conjunction with the igus® motor connection

⁹⁸⁾ Thread/ remaining thread visible

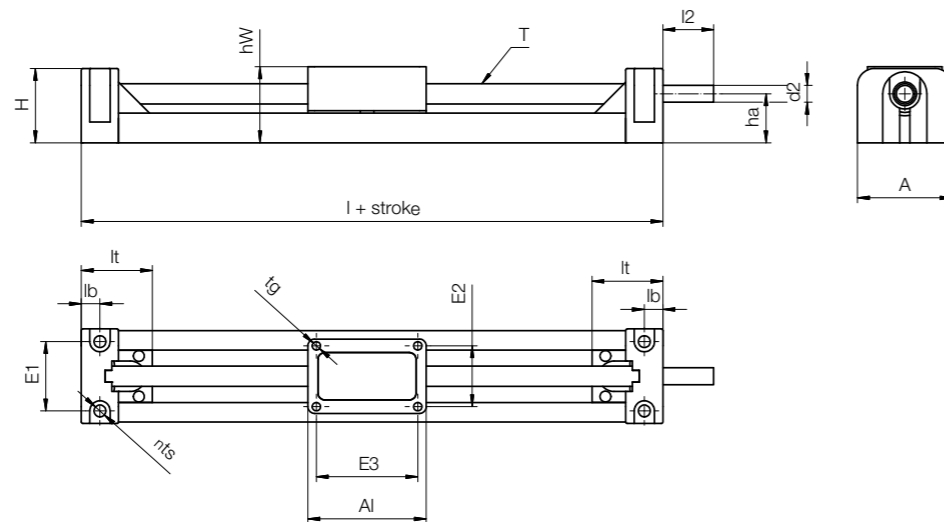




- SLNV linear module for the smallest applications
- For stroke lengths up to 250mm
- High precision due to stop motion pre-load prism slide
- Clearance reduction in z and y directions due to pre-load
- Lead screw with plain or ball bearing
- Self-locking with trapezoidal thread Tr6x2
- Fast and efficient with pre-load
- Feed rate up to 25.4mm per rotation

Typical application areas:

- Medical technology
- Dental equipment
- Research and development
- Measuring technology



Technical data

Part No.	Max. stroke length [mm]	Weight		Max. static load capacity		Max. Speed [rpm]	Max. Drive torque [N]
		[g]	Additional (per 100mm) [g]	Axial	radial		
SLNV-27-0025	250	80	56	10	40	300	0.1
SLNV-27-0051	250	80	56	10	40	300	0.1
SLNV-27-0127	250	80	56	10	40	300	0.1
SLNV-27-0254	250	80	56	10	40	300	0.1

Dimensions [mm]

Part No.	A	A1	H	E1	E2	E3	I	hw	lt	lb	ts	tg	d2 ⁹⁸⁾	l2	ha
	±0.2	-0.1	±0.2	±0.15	±0.15	±0.15		±0.3	±0.2				4 h7		
SLNV-27-0025	28	35	22	20.5	18	30	77	22.5	21	5.5	3.5	6.35x2.54	5	15	14.5
SLNV-27-0051	28	35	22	20.5	18	30	77	22.5	21	5.5	3.5	6.35x5.08	5	15	14.5
SLNV-27-0127	28	35	22	20.5	18	30	77	22.5	21	5.5	3.5	6.35x12.7	5	15	14.5
SLNV-27-0254	28	35	22	20.5	18	30	77	22.5	21	5.5	3.5	6.35x25.4	5	15	14.5

⁹⁸⁾ Thread/remaining thread visible



drylin® general drive technology – Toothed belt axes

Lubrication-free linear modules based on drylin® W guides

Drive: Toothed belt

For fast positioning

End supports with deep groove ball bearings

As single axis or for multi-axis linear robots

