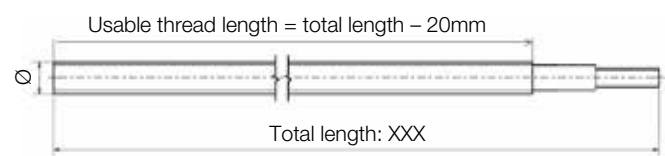


drylin® | Lead screw motors | Product range

Lead screw with precision machined ends



- Material: stainless steel
- Lead screw needs to be secured with an adhesive
- Ready to fit



Technical data – high helix thread with dryspin® technology

Part No.	Motor size	Distance over hubs [mm]	Thread type	Lead screw Ø [mm]	Pitch P	Max. Length
DST-LS-MOT-6.35X2.54-R-XXX-ES	NEMA11	28	DST	6.35	2.54	300
DST-LS-MOT-6.35X25.4-R-XXX-ES	NEMA11	28	DST	6.35	25.4	300
DST-LS-MOT-10X12-R-XXX-ES	NEMA17/23	42 / 56	DST	10	12	500
DST-LS-MOT-10X25-R-XXX-ES	NEMA17/23	42 / 56	DST	10	25	500
DST-LS-MOT-10X50-R-XXX-ES	NEMA17/23	42 / 56	DST	10	50	500
DST-LS-MOT-14X25-R-1000-ES	NEMA17/23	42 / 56	DST	14	25	500

Technical data – trapezoidal lead screw

Part No.	Motor size	Distance over hubs [mm]	Thread type	Lead screw Ø [mm]	Pitch P	Max. Length
PTGSG-MOT-M5X0,8-R-XXX-ES	NEMA11	28	M5	5	0.8	250
PTGSG-MOT-08X1,5-R-XXX-ES	NEMA17/23	42 / 56	Tr	8	1.5	300
PTGSG-MOT-10X2-R-XXX-ES	NEMA17/23	42 / 56	Tr	10	2	500
PTGSG-MOT-12X3-R-XXX-ES	NEMA17/23	42 / 56	Tr	12	3	500
PTGSG-MOT-12X6P3-R-XXX-ES	NEMA17/23	42 / 56	Tr	12	6P3	500

XXX: Lead screw length

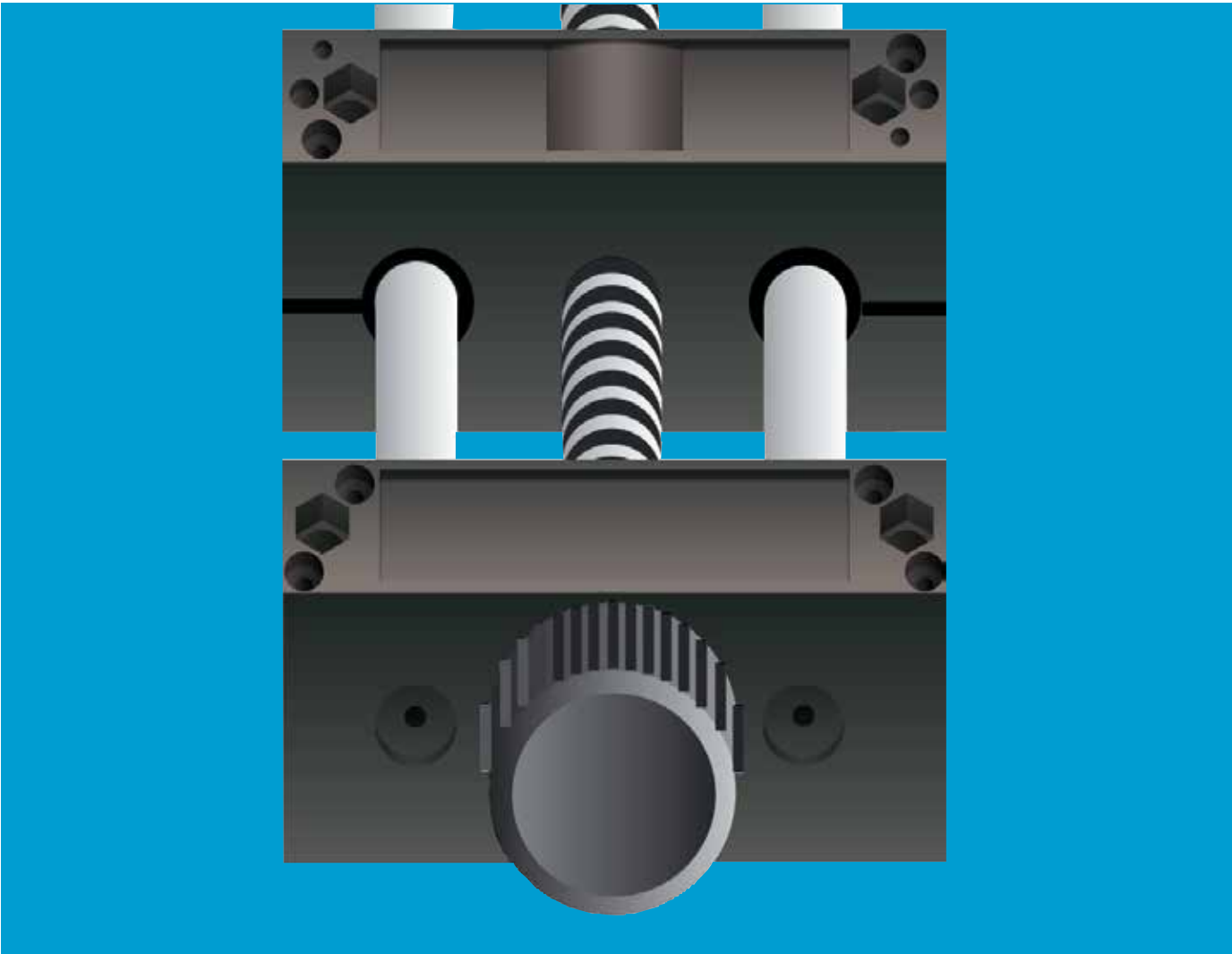


If desired by the factory, please order using the following assembly number:
Assembly front: MONT004F000 (flange side)
Assembly back: MONT004B000 (assembly not possible with a motor with an encoder)



Lead screw needs to be secured with an adhesive (Loctite 648)!

Curing time: after 6 hours approximately 50%
after 24 hours 100%



drylin® general drive technology – econ entry-level series

Cost-effective linear modules

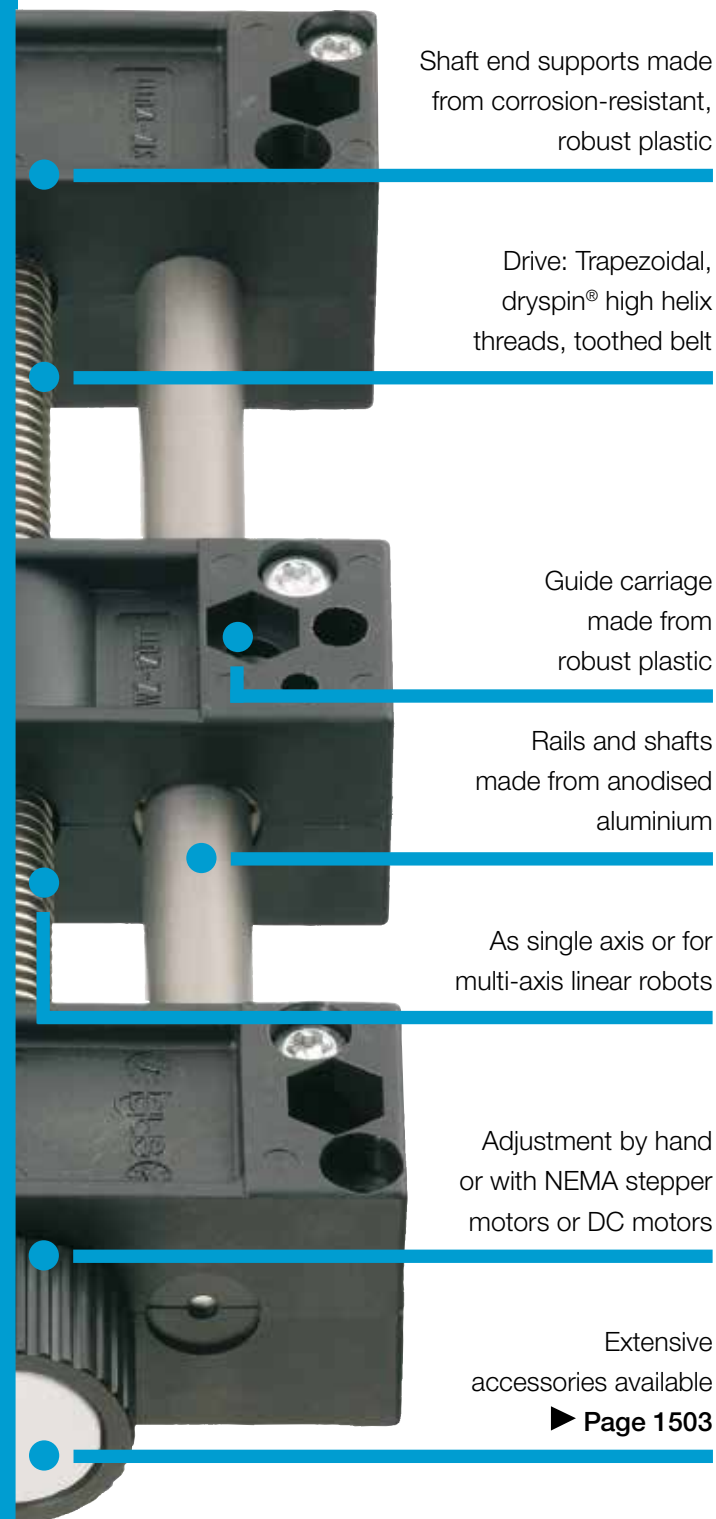
Drive: Trapezoidal and high helix lead screws, toothed belt

Lightweight construction

Corrosion-resistant

For positioning and adjusting tasks





Shaft end supports made from corrosion-resistant, robust plastic

Drive: Trapezoidal, dryspin® high helix threads, toothed belt

Guide carriage made from robust plastic

Rails and shafts made from anodised aluminium

As single axis or for multi-axis linear robots

Adjustment by hand or with NEMA stepper motors or DC motors

Extensive accessories available

► Page 1503

Lubrication-free linear modules – drylin® econ

With econ, igus® defines the cost-effective maintenance-free entry-level models of the drylin® linear axes. There are suitable entry-level models in almost every product line and installation size, either with a lead screw or toothed belt. The econ series is characterised by cost-effective components produced via injection moulding, anodised aluminium profiles and fast assembly. drylin® econ models are configured and delivered so that they are ready to install and are thus the perfect alternative to complex in-house solutions for simple adjustment tasks.

- Lightweight construction due to combination of plastic and aluminium
- Designed for a fast assembly
- Cost-effective due to injection moulding and clear anodised surface

Typical application areas

- Gripper technology
- Format adjustments
- Camera adjustment



Available in 3–8 days

Detailed information about delivery time online.



Price breaks online

No minimum order value. No minimum order quantity.



Carriage lengths: 26–45mm Stroke lengths: up to 500mm



Product finder

► www.igus.eu/shtp-productfinder



drylin® econ SLWP linear module – robust in 2 sizes

- Flat and torsion-resistant due to drylin® W double shaft profiles
- Lead screw with self-locking trapezoidal or metric thread
- Fast adjustment due to dryspin® high helix thread

► Page 1454



drylin® econ SHTP linear module – flexible in 3 sizes

- Lead screws made from aluminium, carbon, steel, stainless steel
- Carriage with integrated lead screw nuts and drylin® R liner
- With trapezoidal or high helix thread

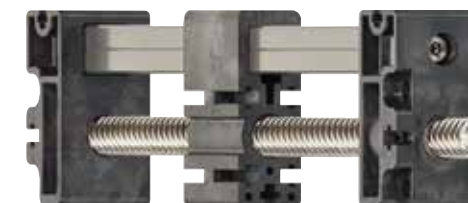
► Page 1456



drylin® econ SLN miniature module SLN – small and fast

- Slim, narrow design
- Lead screw mounted on plain bearings with metric thread or dryspin® high helix thread
- Feed rate of up to 25mm per rotation

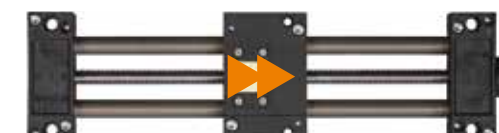
► Page 1460



drylin® econ SLTP linear system – savings thanks to injection moulding

- Developed with 3D printing, produced cost-effectively thanks to injection moulding
- Very fast assembly due to few components
- Carriage with a lot of fastening options

► Page 1455



drylin® econ SHTP-FF linear module – Fast-Forward

- With quick-release mechanism
- For fast adjustment
- Self-locking
- Variable stroke lengths

► Page 1459



drylin® econ ZLW toothed belt axis – light and fast

- Lightweight due to use of plastic and aluminium
- Variable attachment by means of slot nuts and clamping elements
- Individual stroke lengths (sizes 0630 to 500mm, 1040 to 1,000mm)

► Page 1461

drylin® econ DLE-FG flat linear robot – for predefined surfaces

- Linear robot based on econ toothed belt axes
- For a workspace of 500 x 500mm
- Ready to connect with NEMA stepper motors

► Page 1462

The SLW entry-level model



- Based on drylin® W profile guides
- Clear anodised guide rails
- Torsion-resistant double shaft systems
- Self-locking due to metric or trapezoidal thread
- Fast operation without self-locking due to dryspin® high helix thread
- Available accessories

► Page 1503



Order key

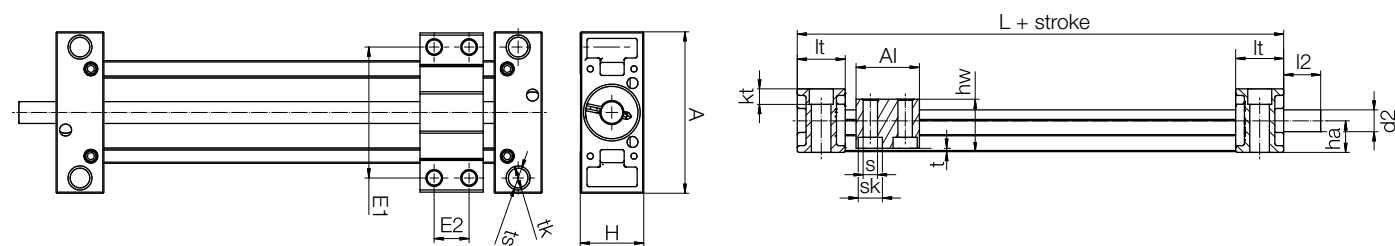
Order example

SLWP-0630-E

Compact

Dimension

econ series



Technical data

Part No.	Max. stroke length	Weight [kg]	Additional (per 100mm) [kg]	Max. stat. load capacity	
	[mm]			axial [N]	radial [N]
SLWP-0630-E	300	0.15	0.08	50	50
SLWP-1040-E	500	0.30	0.10	50	50

Dimensions [mm]

Part No.	A	AI	H	E1	E2	E3	I	hw	f	lt	tk	ts
	-0.3	-0.3		±0.2	±0.2	±0.15				±0.1		
SLWP-0630-E	54	60	20	40	45	51	100	18.0	1.5	20	11	6.6
SLWP-1040-E	74	29	29	60	16	—	73	23.5	1.5	22	11	6.8

Part No.	kt	s	sk	d	T	l2	d2	ha
	±0.1						Standard	
SLWP-0630-E	8.0	5.0	6Kt M4	5.0	Tr8x1.5	15	Tr8x1.5 ¹⁶⁰⁾	9.5
SLWP-1040-E	9.0	6.3	6Kt M6	7.5	Tr10x2	17	Tr10x2 ¹⁶¹⁾	14.5

¹⁶⁰⁾ Alternative: M8, Tr8x1.5, Ds8x10, Ds8x15¹⁶¹⁾ Alternative: Tr10x2, Tr10x3, Ds10x12, Ds10x25, Ds10x50

The SLT entry-level model



- Extremely cost-effective
- Torque-resistant due to AWMQ aluminium square profile
- Variable design
- Left or right-hand lead screw option
- Carriage with many connection options



Order key

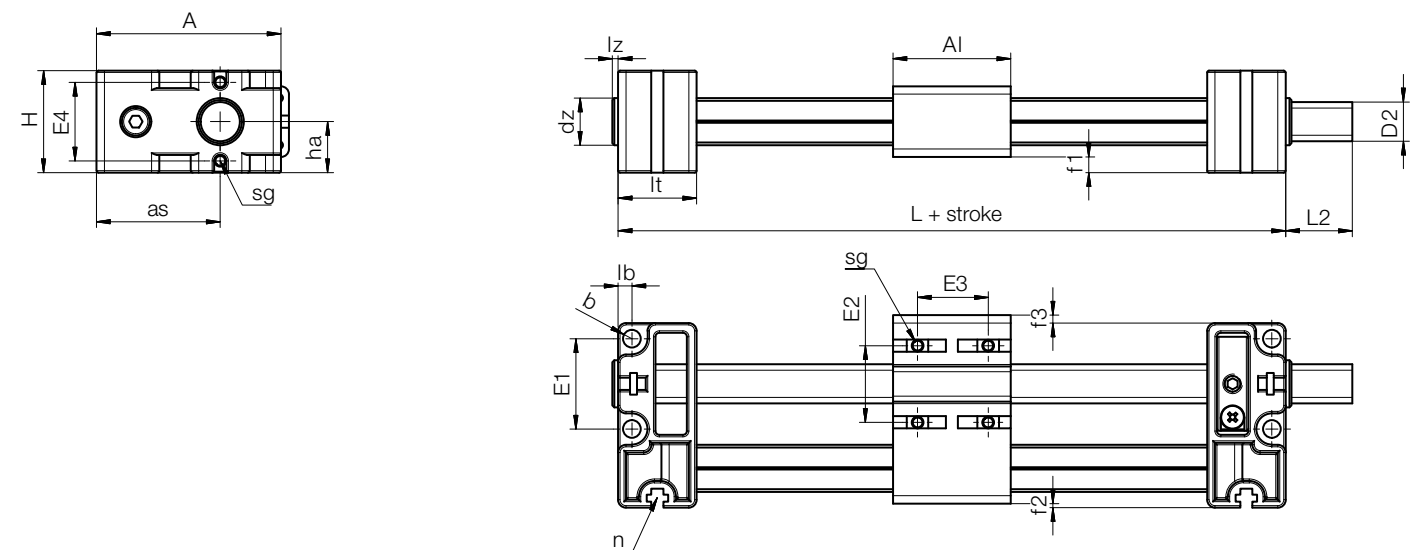
Order example

SLTP-1012-E

Compact

Dimension

econ series



Technical data

Part No.	Max. stroke length	Weight [kg]	Additional (per 100mm) [kg]	Max. stat. load capacity		Max. speed	Max. speed
	[mm]			axial [N]	radial [N]	[rpm]	[m/min]
SLTP-1012-E	300	0.147	0.081	50	100	250	0.5

Dimensions [mm]

Part No.	A	H	L + stroke	AI	L2	D2	E1	E2	E3	E4	T ¹⁵²⁾
SLTP-1012-E	47	26	70	30	17	10	23	19.5	8.5–24.5	20	Tr10x2

Part No.	lt	dz	lz	b	lb	sg ¹⁵³⁾ (DIN562)	ha	as	n	f1	f2	f3
SLTP-1012-E	20	12	1.5	4.5	3.5	M3	13	31.5	M3	4	1	2

¹⁵²⁾ Alternative: Tr10x3, Tr10x4P2, Ds10x12, Ds10x25, Ds10x50¹⁵³⁾ 6 pieces of M3-DIN562 screws included in delivery

The SHT miniature version



- Miniature version
 - Lightweight
 - Cost-effective
 - Corrosion-resistant
 - Carriages and shaft end supports made from high-performance polymers
 - Available accessories
- Page 1503

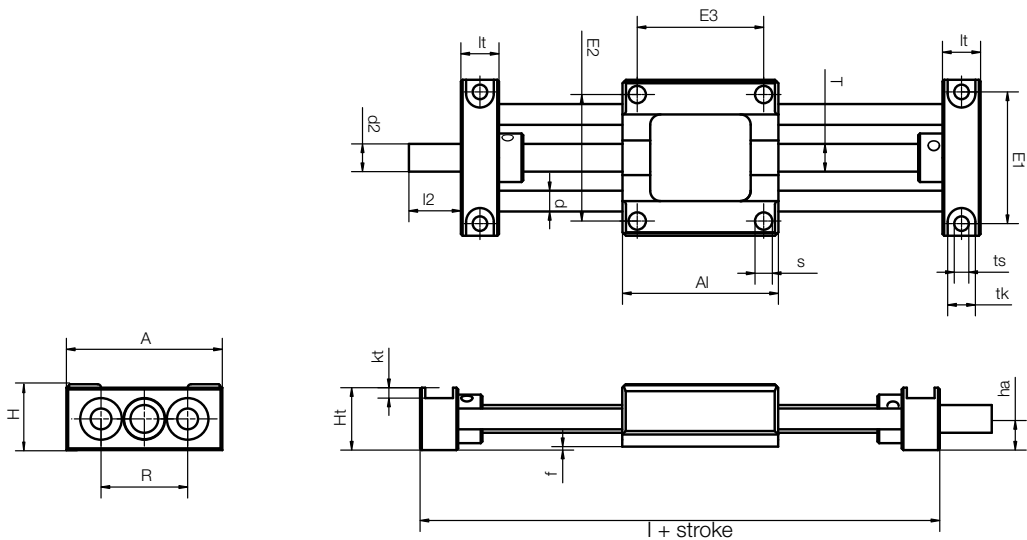


Order key

Order example

SHTP-01-06-AWM

SHT polymer	Design	Dimension	Shaft material
-------------	--------	-----------	----------------



Technical data

Part No.	Max. stroke length [mm]	Aluminium shaft		Max. static load capacity		More Information
		Weight [kg]	Additional [kg] (per 100mm)	axial [N]	radial [N]	
SHTP-01-06-AWM	300	0.11	0.06	50	50	Carriage, square, with 4 symmetrical mounting holes

Dimensions [mm]

Part No.	A	Al	H	Ht	E1	E2	E3	I	R	f	kt	lt	tk	ts
SHTP-01-06-AWM	45	45	19	18	38	36.5	36.5	67	25	1	3	11	8	4.2

Part No.	s	d	T	I2	d2 ⁹⁹⁾	ha
SHTP-01-06-AWM	5.1	6	M8	15	M8	9

⁹⁹⁾ Lead screw end unmachined (standard)

SHTP – the lightweight SHT entry-level model



- Lightweight
 - Low-profile design
 - Ideal for multi-carriage solutions
 - Available accessories
- Page 1503

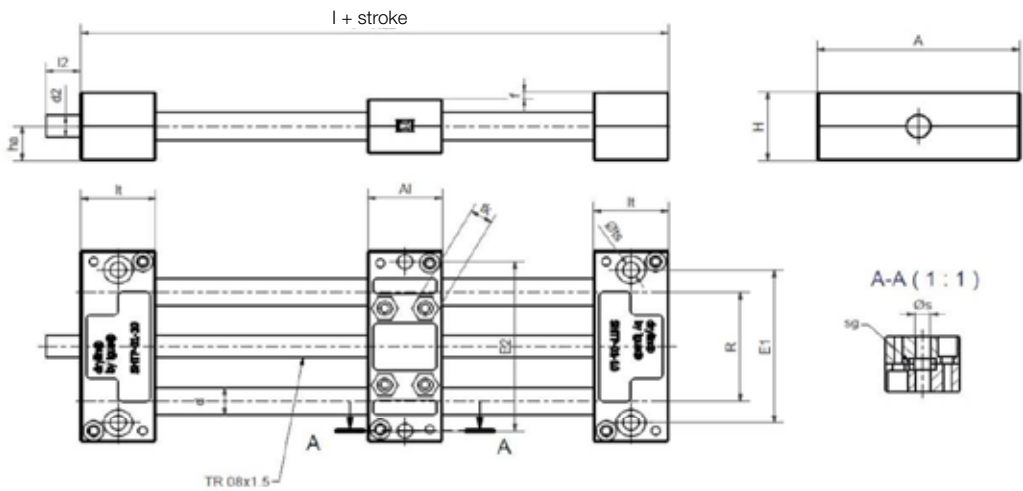


Order key

Order example

SHTP-01-10

SHT polymer	Design	Dimension
-------------	--------	-----------



Technical data

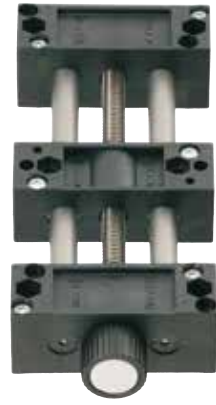
Part No.	Max. stroke length [mm]	Aluminium shaft		More Information
		Weight [kg]	Additional [kg] (per 100mm)	
SHTP-01-10	350	0.2	0.08	Drive nut and linear bearings made from iglidur® J

Dimensions [mm]

Part No.	A	Al	H	E1	E2	I	R	f	lt	tk	ts
SHTP-01-10	70	26	25	56	62	78	40	2.5	±0.1	8	+0.15

Part No.	s	sg	d	T	I2	d2 ⁹⁹⁾	ha	Max. static load capacity	
								axial [N]	radial [N]
SHTP-01-10	5.2	M5	10	Tr08x1.5	15	Tr08x1.5	12.5	100	400

⁹⁹⁾ Lead screw end unmachined (standard)



- Solid polymer design
- Lightweight
- Cost-effective
- Corrosion-resistant
- Available accessories
- Page 1503
- Available with motor



Order key

Order example

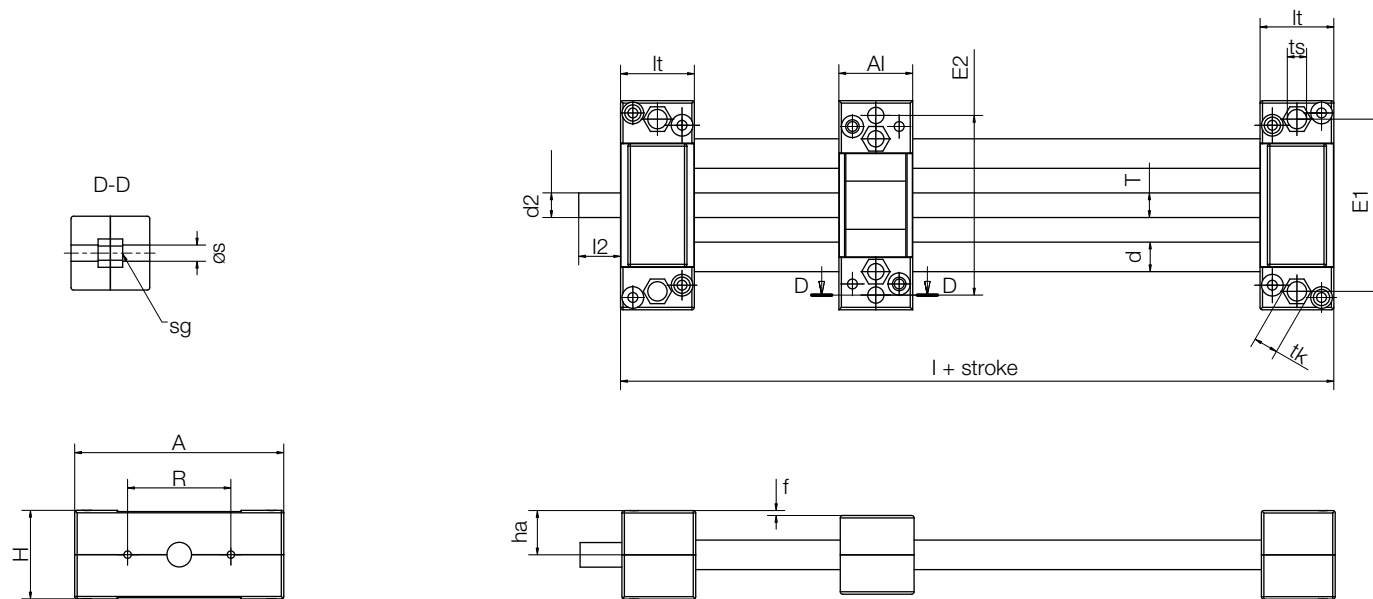
SHTP-01-12-AWM

SHT polymer

Design

Dimension

Shaft material



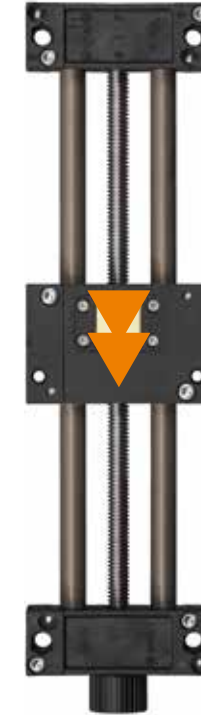
Technical data

Part No.	Max. stroke length [mm]	Aluminium shaft		More Information
		Weight [kg]	Additional [kg] (per 100mm)	
SHTP-01-12	500	0.35	0.11	Drive nut and linear bearings made from iglidur® J
SHTP-02-12	500	0.35	0.11	Bearing and nut integrated into the carriage

Dimensions [mm]

Part No.	A	Al	H	E1	E2	I	R	f	It ±0.1	tk	ts +0.15
SHTP-01-12	85	30	36	70	73	90	42	2	30	10	6.0
SHTP-02-12	85	30	36	70	73	90	42	2	30	10	6.0

Part No.	s	sg	d	T	l2	d2 ⁹⁹⁾	ha	Max. static load capacity	
								axial [N]	radial [N]
SHTP-01-12	6.3	M6	12	Tr10x2	17	Tr10x2	18	200	400
SHTP-02-12	6.3	M6	12	Tr10x2	17	Tr10x2	18	200	400

⁹⁹⁾ Lead screw end unmachined (standard)

- Light solid polymer model
- For fast format adjustments
- Self-locking
- Variable stroke length
- Only recommended for horizontal applications
- Max. stat. axial load 200N
- Max. dynamic. axial load 50N
- Available accessories
- Page 1503



Order key

Order example

SHTP-01-12-AWM-FF

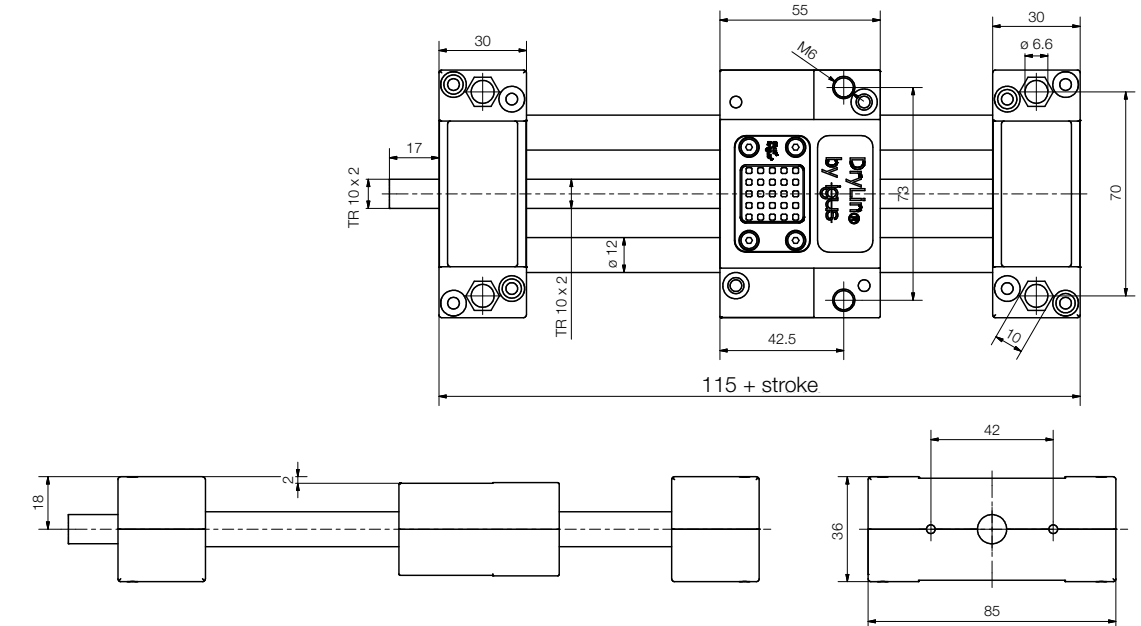
SHT polymer

Design

Dimension

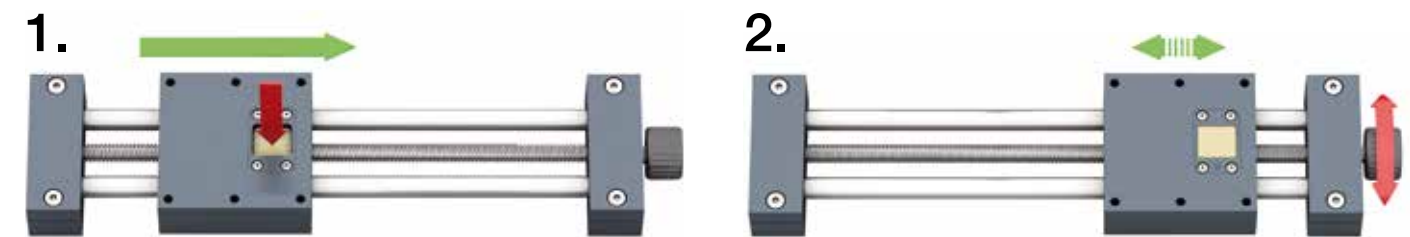
Shaft material

Fast Forward



Technical data

Part No.	Max. stroke length [mm]	Weight [kg]	Additional weight (per 100mm)
SHTP-01-12-AWM-FF ¹⁰⁰⁾	500	0.35	0.11

¹⁰⁰⁾ Liners and lead screw nuts made from iglidur® J

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

Miniature linear module, basic version



- Single parts made from aluminium and plastic
- Entry-level model
- Lead screw with plain bearing support
- Retrofitting possible
- Available accessories
 - Page 1503
- Available with motor



Order key

Order example

SLN-27-03- 0008

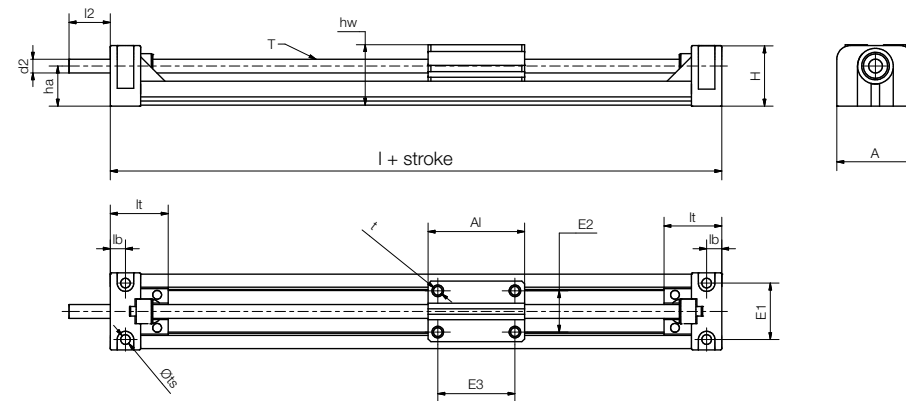
Standard

Dimension

Carriage version

Pitch

Options:
Carriage version
03 = Basic



Technical data

Part No.	Max. stroke length	Weight	Additional	Max. static		Max. speed	Max. drive torque
				load capacity			
			[kg]	Axial	radial		
	[mm]	[kg]	(per 100mm)	[N]	[N]		
SLN-27-03-0008	250	0.06	0.04	10	40	100	0.10
SLN-27-03-0025	250	0.06	0.04	10	40	100	0.15
SLN-27-03-0051	250	0.06	0.04	10	40	100	0.20
SLN-27-03-0127	250	0.06	0.04	10	40	100	0.30
SLN-27-03-0254	250	0.06	0.04	10	40	100	0.40

Dimensions [mm]

Part No.	A	AI	H	E1	E2	E3	E11 ¹⁰²⁾	I	hw	lt	lb	ts	t	T	d2 ⁹⁸⁾	I2	ha
	±0.2	-0.1	±0.2	±0.15	±0.15	±0.15			±0.2	±0.2							
SLN-27-03-0008	28	35	22	20.5	15	28	15	77	22	21	5.5	3.5	3.2	M5	4	15	14.5
SLN-27-03-0025	28	35	22	20.5	15	28	15	77	22	21	5.5	3.5	3.2	6.35x2.54	5	15	14.5
SLN-27-03-0051	28	35	22	20.5	15	28	15	77	22	21	5.5	3.5	3.2	6.35x5.08	5	15	14.5
SLN-27-03-0127	28	35	22	20.5	15	28	15	77	22	21	5.5	3.5	3.2	6.35x12.7	5	15	14.5
SLN-27-03-0254	28	35	22	20.5	15	28	15	77	22	21	5.5	3.5	3.2	6.35x25.4	5	15	14.5

¹⁰²⁾ The dimension E11 can only be found in conjunction with the igus® motor connection⁹⁸⁾ Thread/remaining thread visible

With manual clamp (optional): Part No. SLN-27-HK-...

Linear axes with toothed belt



- Fast positioning of small loads
- Quiet operation and flat design
- Drive pin on one or both sides
- Plastic linear carriage
- Lightweight due to combination of plastic and aluminium
- Technical data
 - Page 1424



Order key

Order example

ZLW-0630-02- E

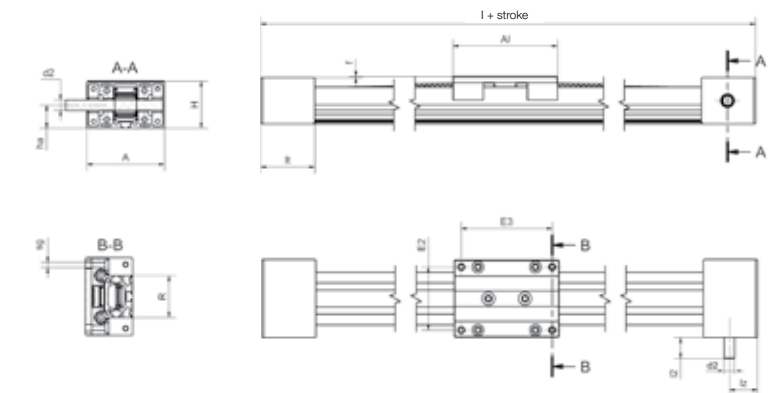
Toothed belt axis

Installation size

Type

Design

Options:
Type
02 = With deep groove ball bearings
Design
E = econ series (0630/1040)



Dimensions [mm]

Part No.	A	AI	H	E2	E3	I	R	f	lt	sg	ha	hc	Iz	I2	d2
	-0.3			±0.15	±0.15		±0.15		±0.3						h9
ZLW-0630-02	54	60	31	45	51	144	30	3	42	M4	14	22.5	20.5	20	8
ZLW-1040-02	74	100	44	60	87	204	40	1	52	M6	22	22.5	27	20	10

Connecting dimensions [mm]

Part No.	X	E	AP	Lp	dp	n	nb	nw	nh	T1	T2	d
		±0.2	-1.0							±0.25	±0.25	
ZLW-0630-02 ¹⁰⁹⁾	variable	40	52	15	5.5	-	-	4.3	7	20	21	3.2
ZLW-1040-02	variable	60	78	40	6.4	5.2	9.5	4.3	15.5	36	26.5	5.0

¹⁰⁹⁾ Basic version: 6mm square, plastic adapter for pin diameter 10mm included

Flat linear robot – for predefined surfaces

**DLE-FG-0003**

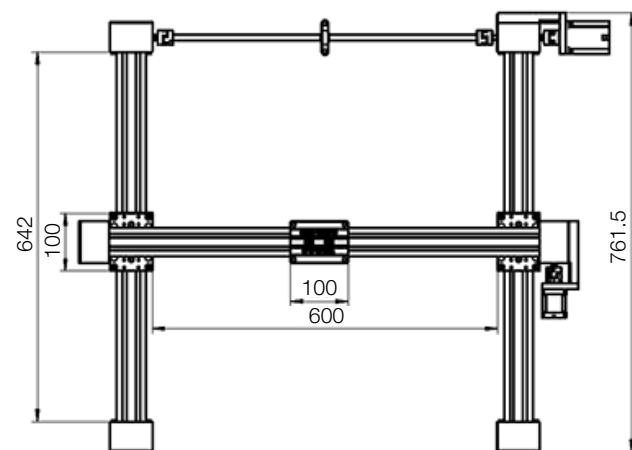
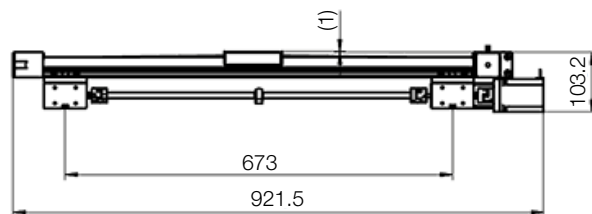
- **x-axis:** drylin® ZLW-1040 econ toothed belt axis with NEMA23 stepper motor with stranded wire
- **y-axis:** drylin® ZLW-1040 econ toothed belt axis with NEMA17 stepper motor
- Proximity switches available

Technical data

Workspace:	500 x 500mm
Max. speed:	0.5m/s
Max. acceleration:	1m/s ²
Repeatability:	1mm
Load capacity:	10N



Part No.
DLE-FG-0003 econ version



drylin® automation

Rotary axes

Cantilever axis

Linear robots

Delta robots

Robot components