

Lightweight, maintenance-free, corrosion-resistant

Lubrication-free low-profile linear guides – drylin® N

The low-profile range drylin® N offers extremely low profiles in several widths. Like all drylin® products the carriages run without lubrication in an anodised aluminium profile. The selected materials and the unique design make drylin® N a cost-effective and flexible guide system.

- Low profile between 6 and 12mm
- Lightweight
- Many carriage options – also with pre-load
- Maintenance-free dry operation
- Corrosion-free
- Low wear with low coefficient of friction
- Silver or black-anodised rails

Typical application areas

- Agricultural machinery
- Automotive
- Medical technology
- Facade construction
- Packaging industry



Available from stock

Detailed information about delivery time online.



Price breaks online

No minimum order value. No minimum order quantity.



Max. +90°C

(+50°C for overmoulded sliding elements)

Min. -40°C



17mm – 80mm



Service life calculation

► www.igus-asean.com/drylin-expert



Cleanroom certificated
IPA Fraunhofer



Free from toxins
2011/65/EU (RoHS)



ESD-compatible
(electrostatic discharge)

Low profile
due to C-profile geometry

Clear or black anodised
aluminium rails

Interchangeable sliding elements
as clip version or captive
overmoulded sliding surfaces

Lightweight due to the use
of plastics and aluminium

Variable carriage lengths

Carriage with threaded
or through hole

Precise due to pre-load

Lubrication-free sliding elements/
carriage made from
high-performance polymer
iglidur® J/J200

Quiet operation through
gliding motion

Rails with standard hole pattern
Or without holes

Numerous options in four different widths for small installation heights



Guide rails

- Four installation sizes: 17, 27, 40 and 80mm
 - Low profile, lightweight design
 - Clear anodised (silver) or black anodised surfaces
- From page 1034



Guide carriage – installation size 17

- Solid plastic made from high-performance polymer iglidur® J
 - Compact for the smallest installation spaces
 - Length of carriage up to 40mm
- Page 1035



Guide carriage – installation size 27

- Carriage with changeable sliding elements
 - Sliding carriages with captive overmoulded sliding elements
 - Variable lengths and screw on options
- Page 1037



Guide carriage – installation size 40

- Carriage with thread pin or plain hole
 - Pre-load version available
- Page 1039



Guide carriage – installation size 80

- Carriage with wide load-bearing surface
 - Lubrication-free due to high-performance polymers iglidur® J/J200
 - Low profile design due to threaded holes
- Page 1041



Telescopic system

- Continuous lengths up to 1,200mm (total extension)
 - Available with partial, total or overextension
 - With locking mechanism if required
- Page 1050



Pre-load prism slides

- Easy positioning of carriage
 - Four pre-load classes
 - Guaranteed drive force and holding force
 - Extremely lightweight low-profile
- From page 1042



Based on drylin® N

drylin® SLN miniature linear module
► From page 1417



The most important decision criterion for drylin® N low-profile linear guides is the low installation height as this makes it possible to achieve a maximum load.



drylin® N low-profile linear guides and drylin® SD lead screw drives perform the height adjustments. As a black-anodised profile, drylin® N blends into the design of the 3D printer.



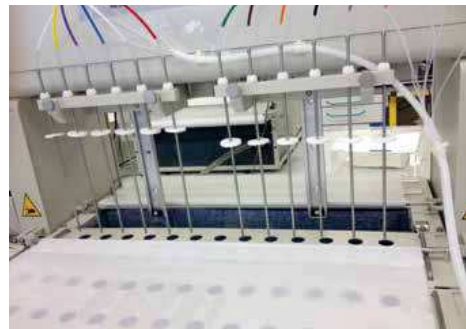
In the redesigning of the table guidance for this automated teller, the focus was on a ready-to-install, cost-effective, durable and lubrication-free bearing and system.



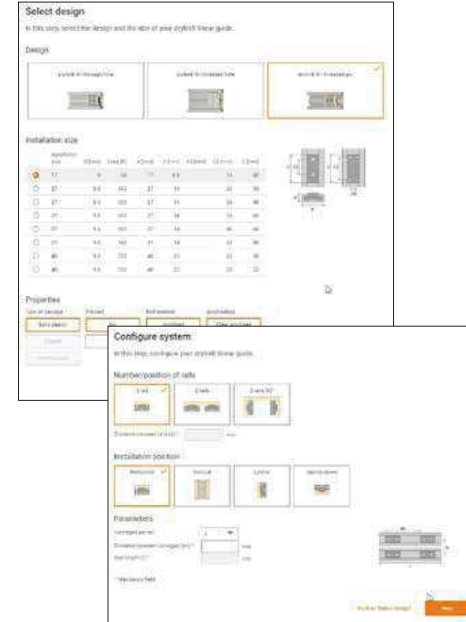
The quiet, lubrication-free, low-profile design of drylin® N made it the ideal solution and enabled it to fulfil all relevant safety requirements. The rails could be connected to the desired length.



The removal unit is moved along the X-Y axis using the space-saving and cost-saving drylin® N low-profile linear guide. The robust drylin® T guide system undertakes the vertical guidance.



The sampling device uses drylin® linear plain bearings to remove the products precisely and smoothly.



Expert for linear guides: System selection & service life calculation with CAD

Configure and calculate the service life of linear bearings – constantly expanded by new sizes and products

Easily calculate the service life of your required linear guide and configure with a few clicks. Select a drylin® system and add the relevant environmental parameters. Select the bearing size, carriage, number and position. Then enter the distance between the rails and the mounting. Define more relevant parameter of the guidance and select a rail length. The results are displayed.



► www.igus-asean.com/drylin-expert



Download the online tool app now



drylin® CAD configurator: Generate complete 3D models for drylin® linear technology according to your specifications

The igus® CAD online configurator gives you the ability to design and save your linear guide as a system, individual components directly as a 3D model in all commonly used formats, or to have these sent by e-mail – free of charge and without registration.



► www.igus-asean.com/drylin-CAD

More information about the products can be found in the igus® download area

- Assembly instructions
- Assembly videos
- System design
- Catalogues



► www.igus-asean.com/downloads

Floating bearings version



NW-...	NW-... LLZ	NW-... LLY	NW-... LLYZ
LLY	Floating bearing in z-direction		
LLZ	Floating bearing in y-direction		
LLYZ	Floating bearing in yz-direction		

Floating bearing	NW-17	NW-27	NW-40	NW-80
LLY	0.6	0.45	0.4	0.6
LLZ	0.5	0.8	0.8	0.8
LLYZ	Y: 0.6	Y: 0.3	Y: 0.4	Y: 0.6
	Z: 0.5	Z: 0.4	Z: 0.8	Z: 0.8

i Technical details on floating bearings ► Page 963
The 2:1 Rule ► Page 963

Technical options for drylin® low-profile linear guides

Clip-on sliding elements

Depending on the installation size, up to three lubrication-free sliding elements made from the high-performance polymer iglidur® J are clipped on around the zinc die-casting carriage body. These can be changed any time simply and fast, the zinc die-casting carriage can be reused. A set of appropriate sliding elements is available for every clip-on carriage (Part No. NEK... ► Page 1048).

Overmoulded sliding elements

With this carriage type, the zinc die-casting body is made as an integral part of the high-performance polymer iglidur® J/ J200 during the injection moulding process. For the user this production process offers the advantage, that the sliding surface is connected captive and insolubly to the carriage. This makes it quicker to install the carriages in the profile. Robust storage is possible, including in the form of bulk goods, as the sliding elements cannot come loose. It is not possible to retrofit sliding elements; the carriages must be entirely replaced at the end of their service life. The continuous operating temperature for overmoulded sliding elements is +50°C.

Pre-load function

The use of sliding elements with an integrated spring pre-load function prevents the carriages in the rail profile from rattling. Adjustment occurs silently using the pre-load principle, making the guide suitable for use in noise-sensitive environments such as the automotive, medical or furniture sectors. Pre-load increases the displacement force by max. 10N.

Anodised surfaces

All drylin® N guide rails are anodised and are distinguished by good wear properties and corrosion resistance. All rail sizes are available as clear-anodised version (silver) as well as anti-reflect version with black-anodised surface. These are technical surfaces and not decorative. Slight crack formations and colour variations cannot be prevented during production, but they do not affect the resistance, the corrosion behaviour or the sliding properties. Cutting surfaces and machined surfaces are uncoated.

Tightening torque for drylin® connections between metal parts

Metric thread (Da)	Tightening torque	Recommended tightening torque
	[Nm]	[Nm]
M3	0.5–1.1	0.7
M4	1.0–2.8	1.5
M5	2.0–5.5	3.0
M6	4.0–10.0	6.0
M8	8.0–23.0	15.0
M10	22.0–46.0	30.0

Please be aware of the minimal screw-in depth for aluminium and zinc die-casting parts: 1.5 x Da

System selection				
System	N17	N27	N40	N80
Rail width	17mm	27mm	40mm	80mm
Installation height	6mm	9.5mm	9.5mm	12mm
General properties				
Rail weight	150g/m	290g/m	450g/m	1,140g/m
Carriage weight	1.7g	9–12.5g	30g	100g
Max. rail length	2,000mm	3,000mm	3,000mm	4,000mm
Load capacity, static				
Fy	50N	500N	700N	1,000N
Fz	50N	500N	700N	1,000N
Mx	0.31Nm	5Nm	10Nm	32.4Nm
My, Mz	0.18Nm	2.5Nm	6Nm	15Nm
Carriage options				
Floating bearing in y-direction	●	●	●	●
Floating bearing in z-direction	●	●	●	●
Floating bearing in yz-direction	●	●	●	●
Pre-load (1N)	●	●	●	–
Overmoulded version	–	●	●	●
Carriage with through hole	–	●	●	–
Carriage with threaded pin	●	●	●	–
Carriage with threaded hole	–	–	–	●

Table 01: System selection ● available – not available

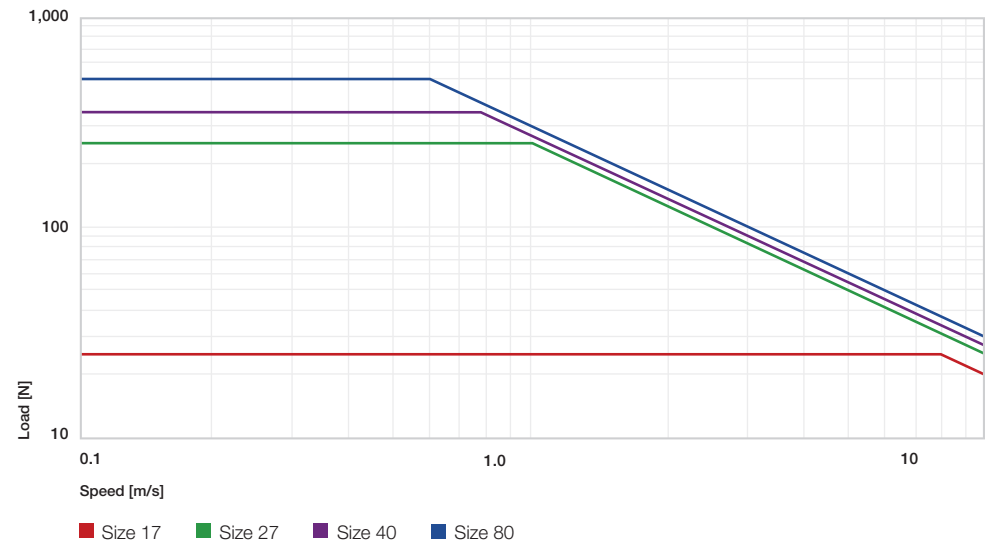


Diagram 01: F v diagram, maximum permissible dynamic load



Complete system



Order key

Type	Installation size	Options
NW - 22 - 17 - 30 - LLY		
drylin® N Guide carriage	Type of carriage	Options:
Rail width	Carriage length	P: Pre-load
Floating bearing in y-direction		Floating bearing:
		LLY: y-direction (not possible with the "P" version)
		LLZ: z-direction
		LLYZ: yz-direction

Guide rail – dimensions [mm]

Part No.	L	a	C4	C5	C6	h	h1	K1 ⁷³⁾	ly	lz	Weight
	Max.			Min.	Max.			Ø3.5	[mm ²]	[mm ²]	[g/m]
NS-01-17- [] ⁷²⁾	2,000	17	60	20	49.5	5.5	0.9	Ø3.5	1,700	120	150
NS-01-17-UNGEBOHRT- [] ⁷²⁾	2,000	17	-	-	-	5.5	0.9	-	1,700	120	150
NS-01-17-AR- [] ⁷²⁾	2,000	17	60	20	49.5	5.5	0.9	Ø3.5	1,700	120	150

Guide carriage – dimensions [mm]

Part No.	H ±0.35	A	C	C2	K3 ⁷⁴⁾	Sp	Dp ¹⁵⁹⁾	Weight [g]
NW-02-17	6.0	9.6	20	14	M3	2.5	5.0	1.7
NW-02-17-P	6.0	9.6	20	14	M3	2.5	5.0	1.7
NW-22-17-30	6.0	9.6	30	18	M3	2.5	5.0	2.4
NW-22-17-40	6.0	9.6	40	28	M3	2.5	5.0	2.6

⁷²⁾ Please give the required length in mm, symmetrical standard hole pattern C5=C6

⁷³⁾ For cap screw with low head (e.g. DIN 7984, DIN 6912, DIN 84, EN ISO 1707)

⁷⁴⁾ Metal thread

¹⁵⁹⁾ Hole min. Ø



All elements can be ordered individually or as assembled systems

NS-01-17-1500: Guide rail, installation size 17, 1,500mm length

NK-02-17-02-500-LLY: Complete system with two solid plastic guide carriages with threaded pins, installation size 17, floating bearing in y-direction and 500mm guide rails with standard holes



Standard

Without holes

Anti-reflect



NW-02-17



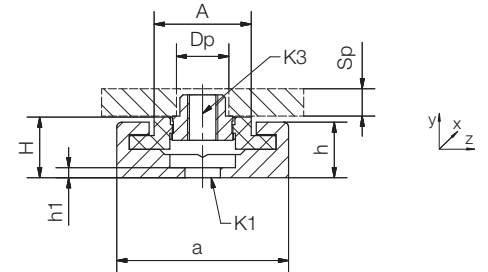
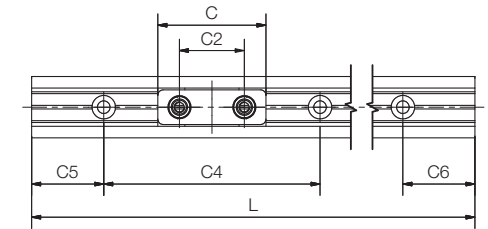
NW-02-17-P



NW-22-17-30



NW-22-17-40



Selection aid – guide carriage

Part No.	Single	Double	Through hole	Threaded pin	Threaded hole	Pre-load	Solid plastic	Clipped-on	Over-moulded	High temp.
NW-02-17	●			●			●			
NW-02-17-P	●			●		●	●			
NW-22-17-30		●		●			●			
NW-22-17-40		●		●			●			



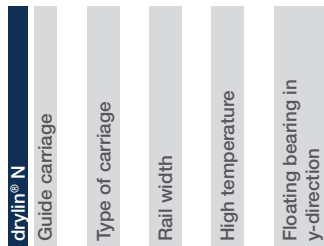
Complete system



Order key

Type Size Options

NW - 01 - 27 - HT - LLY



Type of carriage:
See selection aid
Options:
P: Pre-load
HT: High temperature
Floating bearing:
LLY: y-direction
LLZ: z-direction
LLYZ: yz-direction

Guide rail – dimensions [mm]

Part No.	L	a	C4	C5	C6	h	h1	K1 ⁷³⁾	ly	lz	Weight
	Max.			Min.	Max.				[mm ²]	[mm ²]	[g/m]
NS-01-27-□ ⁷²⁾	3,000	27	60	20	49.5	9	1.1	Ø4.5	6,524	588	290
NS-01-27-UNGEBOHRT-□ ⁷²⁾	3,000	27	-	-	-	9	1.1	-	6,524	588	290
NS-01-27-AR-□ ⁷²⁾	3,000	27	60	20	49.5	9	1.1	Ø4.5	6,524	588	290

Guide carriage – dimensions [mm]

Part No.	H	A	C	C1	C2	H2	K ⁷³⁾	K3 ⁷⁴⁾	M ⁷⁵⁾	Sp	Dp ¹⁵⁹⁾	Weight
	±0.35								[Nm]			[g]
NW-01-27	9.5	14.0	40	30	20	1.2	Ø4.5	-	-	-	-	10.8
NW-11-27	9.5	14.0	34	30	20	1.2	Ø4.5	-	-	-	-	10.8
NW-01-27-P	9.5	14.0	40	30	20	1.2	Ø4.5	-	-	-	-	10.8
NW-01-27-HT	9.5	14.0	40	30	20	1.2	Ø4.5	-	-	-	-	11.0
NW-02-27	9.5	14.0	40	30	20	-	-	M4	1.2	5.0	6.5	12.5
NW-12-27	9.5	14.0	34	30	20	-	-	M4	1.2	5.0	6.5	12.5
NW-02-27-P	9.5	14.0	40	30	20	-	-	M4	1.2	5.0	6.5	12.5
NW-02-27-HT	9.5	14.0	40	30	20	-	-	M4	-	5.0	6.5	13.0
NW-21-27-60-P	9.5	14.0	60	60	20	0.7	Ø4.5	-	-	-	-	9.0
NW-22-27-60-P	9.5	14.0	60	60	20	-	-	M4	1.2	5.0	6.5	12.0
NW-31-27-60-P	9.5	14.0	60	60	40	0.7	-	M4	-	-	-	9
NW-32-27-60-P	9.5	14.0	60	60	40	-	-	M4	1.2	5	6.5	12
NW-11-27-80	9.5	14.0	80	76	60	1.2	Ø4.5	-	-	-	-	25.0
NW-12-27-80	9.5	14.0	80	76	60	-	-	M4	1.2	5.0	6.5	25.0

⁷²⁾ Please give the required length in mm, symmetrical standard hole pattern C5=C6

⁷³⁾ For cap screw with low head (e.g. DIN 7984, DIN 6912, DIN 84, EN ISO 1707)

⁷⁴⁾ Metal thread ⁷⁵⁾ Max. screw tightening torque ¹⁵⁹⁾ Hole min. Ø

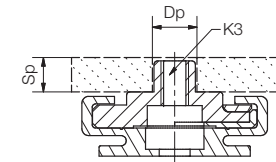
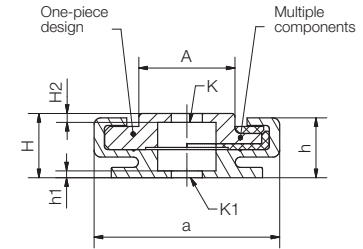
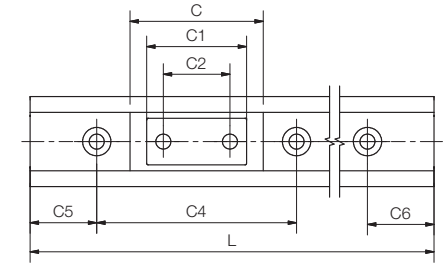
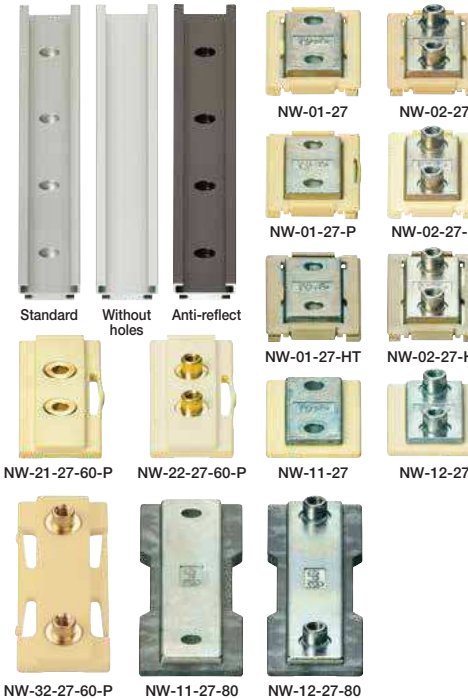


All elements can be ordered individually or as assembled systems

NS-01-27-1500: Guide rail, installation size 27, 1,500mm length

NW-02-27-P-LLY: Guide carriage with threaded pin, installation size 27, pre-load, floating bearing in y-direction

NK-02-27-02-500-LLY: Complete system with two clipped-on guide carriages with threaded pins, installation size 27, floating bearing in y-direction and 500mm guide rails with standard holes



Selection aid – guide carriage

Part No.	Single	Double	Through hole	Threaded pin	Threaded hole	Pre-load	Solid plastic	Clipped-on	Over-moulded	High temp.
NW-01-27	●		●					●		
NW-11-27	●		●						●	
NW-01-27-P	●		●			●		●		
NW-01-27-HT	●		●					●		●
NW-02-27	●			●				●		
NW-12-27	●			●					●	
NW-02-27-P	●			●		●		●		
NW-02-27-HT	●			●				●		●
NW-21-27-60-P	●		●			●	●			
NW-22-27-60-P	●			●		●	●			
NW-31-27-60-P	●		●			●	●			
NW-32-27-60-P	●			●		●	●			
NW-11-27-80		●	●						●	
NW-12-27-80		●		●					●	



Complete system



Order key

Type Size Options

NW - 01 - 40 - P - LLY

drylin® N	Guide carriage	Type of carriage	Rail width	Pre-load	Floating bearing in y-direction
-----------	----------------	------------------	------------	----------	---------------------------------

Type of carriage:
See selection aid
Options:
P: Pre-load
Floating bearing:
LLY: y-direction
LLZ: z-direction
LLYZ: yz-direction

Guide rail – dimensions [mm]

Part No.	L	a	C4	C5	C6	h	h1	K1 ⁷³⁾	ly	lz	Weight [g/m]
	Max.			Min.	Max.				[mm ²]	[mm ²]	
NS-01-40-□ ⁷²⁾	3,000	40	60	20	49.5	8.7	1.3	Ø4.5	26,400	970	450
NS-01-40-UNGEBOHRT-□ ⁷²⁾	3,000	40	-	-	-	8.7	1.3	-	26,400	970	450
NS-01-40-AR-□ ⁷²⁾	3,000	40	60	20	49.5	8.7	1.3	Ø4.5	26,400	970	450

Guide carriage – dimensions [mm]

Part No.	H	A	C	C1	C2	H2	K ⁷³⁾	K3 ⁷⁴⁾	Sp	Dp ¹⁵⁹⁾	Weight [g]
	±0.35										
NW-01-40	9.5	23.0	50	40	20	1.3	Ø4.5	-	-	-	30.0
NW-01-40-P	9.5	23.0	50	40	20	1.3	Ø4.5	-	-	-	30.0
NW-11-40	9.5	23.0	52	40	20	1.3	Ø4.5	-	-	-	30.0
NW-02-40	9.5	23.0	50	40	20	-	-	M4	5.0	6.5	30.0
NW-02-40-P	9.5	23.0	50	40	20	-	-	M4	5.0	6.5	30.0
NW-12-40	9.5	23.0	52	40	20	-	-	M4	5.0	6.5	30.0

⁷²⁾ Please give the required length in mm, symmetrical standard hole pattern C5=C6

⁷³⁾ For cap screw with low head (e.g. DIN 7984, DIN 6912, DIN 84, EN ISO 1707)

⁷⁴⁾ Metal thread

¹⁵⁹⁾ Hole min. Ø



All elements can be ordered individually or as assembled systems

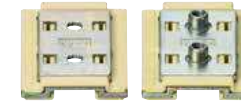
NS-01-40-1500: Guide rail, installation size 40, 1,500mm length

NW-02-40-P-LLY: Guide carriage with threaded pin, installation size 40, pre-load, floating bearing in y-direction

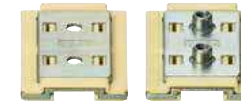
NK-02-40-02-500-LLY: Complete system with two clipped-on guide carriages with threaded pins, installation size 40, floating bearing in y-direction and 500mm guide rails with standard holes



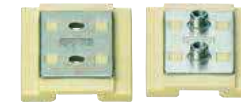
Standard Without holes Anti-reflect



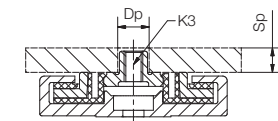
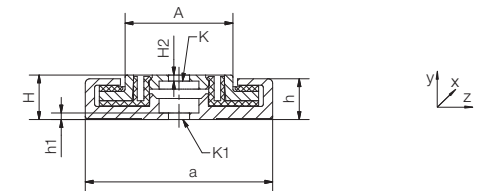
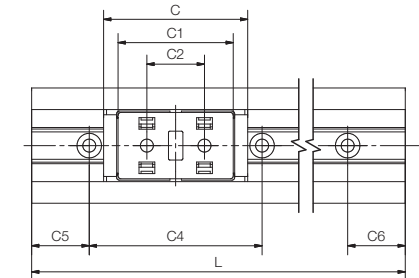
NW-01-40 NW-02-40



NW-01-40-P NW-02-40-P



NW-11-40 NW-12-40



Selection aid – guide carriage

Part No.	Single	Double	Through	Threaded	Threaded	Pre-load	Solid plastic	Clipped-on	Over-moulded	High temp.
			hole	pin	hole					
NW-01-40	●		●					●		
NW-01-40-P	●		●			●		●		
NW-11-40	●		●						●	
NW-02-40	●			●				●		
NW-02-40-P	●			●		●		●		
NW-12-40	●			●					●	



Complete system



Order key

Type Size Options

NW - 02 - 80 - LLY

- drylin® N Guide carriage
- Type of carriage
- Rail width
- Floating bearing in y-direction

Type of carriage:
See selection aid
Options:
Floating bearing:
LLY: y-direction
LLZ: z-direction
LLYZ: yz-direction

Guide rail (standard/without holes/AR anti-reflect) – dimensions [mm]

Part No.	L	a	C4	A3	C5 C6		h	h1	K1 ⁷³⁾	ly	lz	Weight
					Min.	Max.						
NS-01-80- <input type="checkbox"/> ⁷²⁾	4,000	80	150	40	25	99.5	11	1.5	Ø4.5	27,120	2,900	1,140
NS-01-80-UNGEBOHRT- <input type="checkbox"/> ⁷²⁾	4,000	80	-	-	-	-	11	1.5	-	27,120	2,900	1,140
NS-01-80-AR- <input type="checkbox"/> ⁷²⁾	4,000	80	150	40	25	99.5	11	1.5	Ø4.5	27,120	2,900	1,140

Guide carriage – dimensions [mm]

Part No.	H	A	C	C1	C2	A2	K4 ⁷⁴⁾	Weight
NW-02-80	12.0	57.0	80	68	56	45	M4	100.0
NW-12-80	12.0	57.0	83	68	56	45	M4	146.3

⁷²⁾ Please give the required length in mm, symmetrical standard hole pattern C5=C6

⁷³⁾ For cap screw with low head (e.g. DIN 7984, DIN 6912, DIN 84, EN ISO 1707)

⁷⁴⁾ Metal thread



All elements can be ordered individually or as assembled systems

NS-01-80-1500: Guide rail, size 80, 1,500mm length

NW-02-80-LLY: Guide carriage, clip-on, installation size 80, floating bearing in y-direction,

NK-02-80-02-500-LLY: Complete system with two clipped-on guide carriages with threaded pins, installation size 80, floating bearing in y-direction and 500mm guide rails with standard holes



Standard



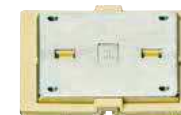
Without holes



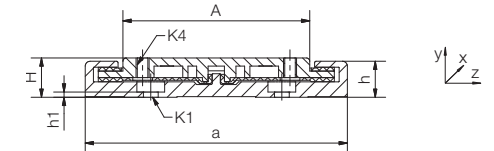
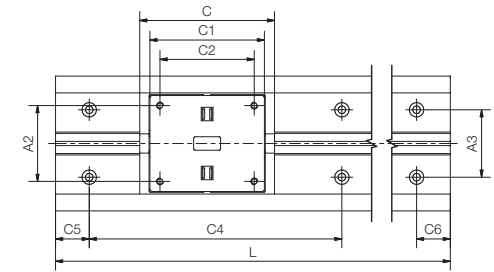
Anti-reflect



NW-12-80



NW-02-80



Selection aid – guide carriage

Part No.	Single	Double	Through hole	Threaded pin	Threaded hole	Pre-load	Solid plastic	Clipped-on	Over-moulded	High temp.
NW-02-80	●				●			●		
NW-12-80	●				●				●	



Order key

Type	Installation size	Options
------	-------------------	---------

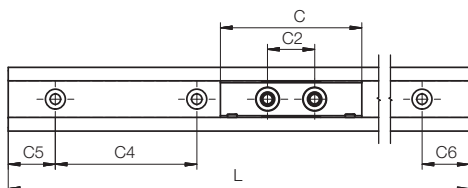
NSV - 01 - 27 - AR - UNGEBOHRT

Guide rail for
pre-load prism slide

Type

Installation size

Anti-reflect



Guide rail – dimensions [mm]

Part No.	L	a	C4	C5 C6		h	h1	K1	ly	lz	Weight
				Min.	Max.						
NSV-01-27	Max. 3,000	27	60	20	49.5	8.8	1.1	Ø4.5	11,250	766	409
NSV-01-27-AR	New 3,000	27	60	20	49.5	8.8	1.1	Ø4.5	11,250	766	409
NSV-01-27-□ ⁷²⁾	3,000	27	-	-	-	8.8	1.1	-	11,250	766	409
NSV-01-27-□-AR ⁷²⁾	New 3,000	27	-	-	-	8.8	1.1	-	11,250	766	409

⁷²⁾ Please give the required length in mm, symmetrical standard hole pattern C5=C6

drylin® stop motion full product range online
▶ www.igus-asean.com/drylinstopmotion



Order key

Type	Installation size	Options
------	-------------------	---------

NWV - 21 - 27 - 35 - P05

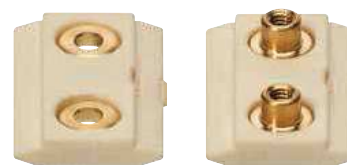
Pre-load prism slide

Type of carriage

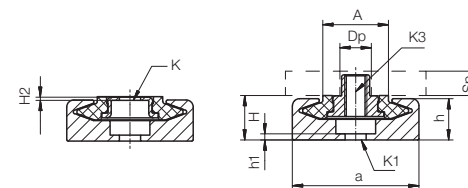
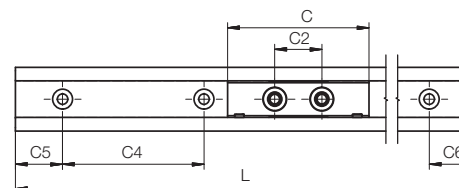
Rail width

Carriage length

Pre-load



With threaded pin 22 or with through hole 21



Guide carriage – dimensions [mm]

Part No.	Pre-load	H	A	C	C2	H2	K	K3	M ⁷⁵⁾	SP	Dp ¹⁵⁹⁾	Weight
NWV-21-27-35-P05	0.5	9.5	14	35	20	0.7	Ø4.5	-	-	-	-	6
NWV-21-27-35-P11	1.1	9.5	14	35	20	0.7	Ø4.5	-	-	-	-	6
NWV-21-27-35-P23	2.3	9.5	14	35	20	0.7	Ø4.5	-	-	-	-	6
NWV-21-27-35-P38	3.8	9.5	14	35	20	0.7	Ø4.5	-	-	-	-	6
NWV-21-27-35-P80	New 8.0	9.5	14	35	20	0.7	Ø4.5	-	-	-	-	6
NWV-22-27-35-P05	0.5	9.5	14	35	20	-	-	M4	1.2	5	6.5	11
NWV-22-27-35-P11	1.1	9.5	14	35	20	-	-	M4	1.2	5	6.5	11
NWV-22-27-35-P23	2.3	9.5	14	35	20	-	-	M4	1.2	5	6.5	11
NWV-22-27-35-P38	3.8	9.5	14	35	20	-	-	M4	1.2	5	6.5	11
NWV-22-27-35-P80	New 8.0	9.5	14	35	20	-	-	M4	1.2	5	6.5	11

⁷⁵⁾ Max. screw tightening torque

¹⁵⁹⁾ Hole min. Ø

drylin® stop motion full product range online
▶ www.igus-asean.com/drylinstopmotion



Order key

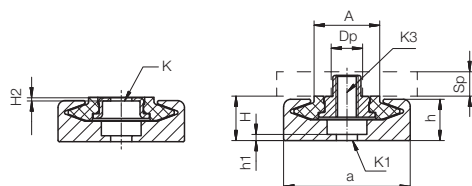
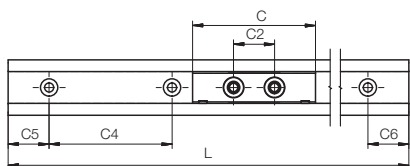
Type	Installation size	Options
------	-------------------	---------

NWV - 21 - 27 - 60 - P10

Pre-load prism slide	Type of carriage	Rail width	Carriage length	Pre-load
----------------------	------------------	------------	-----------------	----------



With threaded pin 22 or with through hole 21



Guide carriage – dimensions [mm]

Part No.	Pre-load	H	A	C	C2	H2	K	K3	M ⁷⁵⁾	SP	Dp ¹⁵⁹⁾	Weight
NWV-21-27-60-P10	1.0	9.5	14	60	20	0.7	Ø4.5	-	-	-	-	10
NWV-21-27-60-P22	2.2	9.5	14	60	20	0.7	Ø4.5	-	-	-	-	10
NWV-21-27-60-P46	4.6	9.5	14	60	20	0.7	Ø4.5	-	-	-	-	10
NWV-21-27-60-P76	7.6	9.5	14	60	20	0.7	Ø4.5	-	-	-	-	10
NWV-21-27-60-P160 New	16.0	9.5	14	60	20	0.7	Ø4.5	-	-	-	-	6
NWV-22-27-60-P10	1.0	9.5	14	60	20	-	-	M4	1.2	5	6.5	13
NWV-22-27-60-P22	2.2	9.5	14	60	20	-	-	M4	1.2	5	6.5	13
NWV-22-27-60-P46	4.6	9.5	14	60	20	-	-	M4	1.2	5	6.5	13
NWV-22-27-60-P76	7.6	9.5	14	60	20	-	-	M4	1.2	5	6.5	13
NWV-22-27-60-P160 New	16.0	9.5	14	60	20	-	-	M4	1.2	5	6.5	11

⁷⁵⁾ Max. screw tightening torque¹⁵⁹⁾ Hole min. Ø

drylin® stop motion full product range online

► www.igus-asean.com/drylinstopmotion

Standard carriages

Part No.	Average displacement force [N]
NWV-21/22-27-35-P05	1.0
NWV-21/22-27-35-P11	2.2
NWV-21/22-27-35-P23	4.6
NWV-21/22-27-35-P38	7.6
NWV-21/22-27-35-P80	16.0

Part No.	Guaranteed holding force [N]
NWV-21/22-27-35-P05	0.5
NWV-21/22-27-35-P11	1.1
NWV-21/22-27-35-P23	2.3
NWV-21/22-27-35-P38	3.8
NWV-21/22-27-35-P80	8.0

Long carriages

Part No.	Average displacement force [N]
NWV-21/22-27-60-P10	2.0
NWV-21/22-27-60-P22	4.4
NWV-21/22-27-60-P46	9.2
NWV-21/22-27-60-P76	15.2
NWV-21/22-27-60-P160	32.0

Part No.	Guaranteed holding force [N]
NWV-21/22-27-60-P10	1.0
NWV-21/22-27-60-P22	2.2
NWV-21/22-27-60-P46	4.6
NWV-21/22-27-60-P76	7.6
NWV-21/22-27-60-P160	16.0



Note:

The average displacement force values apply to unloaded carriages at centric drive. The real displacement forces depend to a large extent on the displacement speed. At creep movement (few mm/min.), the values are slightly over the guaranteed holding force. At higher displacement forces, the values can considerably exceed the average displacement force. The values do not apply for applications in which dirt and moisture ingress into the system. The holding force cited is a minimum value – the displacement force required to move the carriage may be higher.



drylin® stop motion full product range online

► www.igus-asean.com/drylinstopmotion

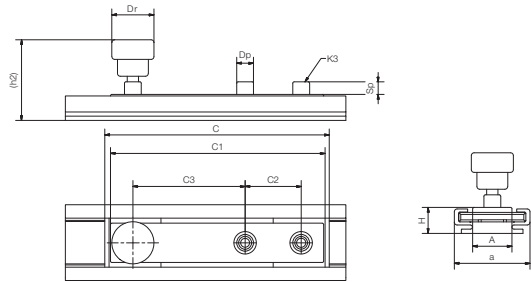


Order key

Type	Size	Version
------	------	---------

NW - 12 - 27 - 80 - HKA

drylin® N Guide carriage	Type of carriage	Rail width	Carriage length	Manual clamp
-----------------------------	------------------	------------	-----------------	--------------



Dimensions [mm]

Part No.	H	h2	A	a	C	C1	C2	C3	K3	M	Sp	Dp	Dr	Weight
										[Nm]				[g]
NW-12-27-80-HKA	9.5	32	14	27	80	76	20	40	M4	1.2	5	6.5	15	32

M: Permissible torque of the complete system



Order example:

NW-12-27-80-HKA: Manual clamp for NW-12-27-80 carriage

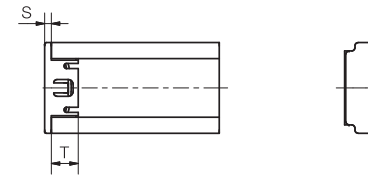


Order key

Type	Size
------	------

NSKB - 40

drylin® N - end cap	Push-fit	Rail width
------------------------	----------	------------



Dimensions [mm]

Part No.	S	T	For rail
NSKB-17	1.5	7	NS-01-17
NSKB-27	2.0	8	NS-01-27
NSK-40	1.5	8	NS-01-40
NSKB-80	2.0	17	NS-01-80



Order example:

NSK-40: End caps for guide rail size 40, bolted



Easily assembled and disassembled by hand using a screwdriver. Part No.: NSKB



End caps for rail size 40, screwed
Part No.: NSK-40

drylin® N replacement plastic sliders (set)

Material iglidur® J

Carriage type	Part No.
	Sliding part set
NW-01/02/27	NEK-01-27
NW-01/02-27P	NEK-01-27-P
NW-01/02-27-LLY	NEK-01-27-LLY
NW-01/02-27-LLZ	NEK-01-27-LLZ
NW-01/02-40	NEK-02-40
NW-01/02-40P	NEK-01-40-P
NW-01/02-40-LLY	NEK-02-40-LLY
NW-01/02-40-LLZ	NEK-02-40-LLZ
NW-02-80	NEK-02-80
NW-02-80-LLY	NEK-02-80-LLY
NW-02-80-LLZ	NEK-02-80-LLZ



drylin® linear technology – drylin® N telescopic rails

Continuously extendable

Lubrication-free dry-tech® sliding elements

Quiet, sliding movement

Full extension, partial extension, overextension



Telescopic rails

- Robust plastic/aluminium version
- Lightweight
- Cost-effective
- Corrosion-free
- Continuous lengths up to 1,200mm (total extension)

 Order key

Type	Size
------	------

N T -35 -300

drylin® N	Telescopic system	Rail width	Length [mm]
-----------	-------------------	------------	-------------

 Order key overextension

Type	Size	Option
------	------	--------

N T -35 -300 -320


drylin® N	Telescopic system	Rail width	Length [mm]	Overextension [mm]
-----------	-------------------	------------	-------------	--------------------

 Order key partial extension

Type	Size	Option
------	------	--------

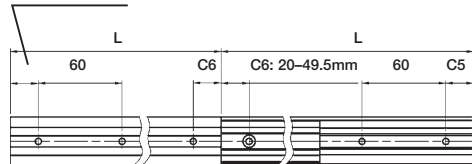
N T -35 -300 -200

drylin® N	Telescopic system	Rail width	Length [mm]	Partial extension [mm]	Option:
					Partial extension (example: compressed length 300mm, extended length 500mm)

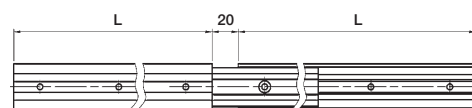
 **Tip:** F_{max} calculated using this formula allows an easy manual use. Higher loads can be taken up by the system, but need a higher drive force.

NT-35-"L" – Total extension

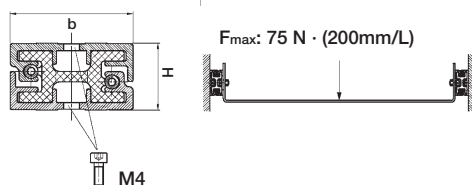
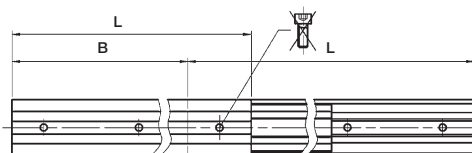
C5: 20–49.5mm



NT-35-"L"-"L+20" – overextension



NT-35-"L"-"B" – Partial extension



$F_{max}: 75 \text{ N} \cdot (200\text{mm/L})$

Dimensions [mm]

Part No.	b	H	C4	C5 = C6		L	
				Min.	Max.	Min.	Max.
NT-35-... mm	35	19	60	20	49.5	100	600

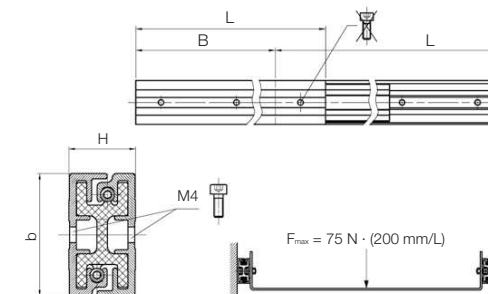
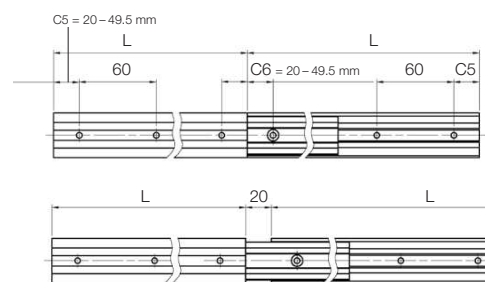
Telescopic rails with locking mechanism

 Order key

Type	Size	Option
------	------	--------

N T -LM- 35 -300

drylin® N	Telescopic system	Locking mechanism	Rail width	Length [mm]
-----------	-------------------	-------------------	------------	-------------



drylin® NT LM in adjustment of Perspex guard




drylin® NT LM in guard door adjustment in a machine tool

drylin® detent in end and centre position at full extension – dimensions [mm]

Part No.	b	H	Lmin	Lmax.
NT-LM-35-...mm	35	19	140	600

Individual position detent upon request; The length divided by the locking distance must be an even number. e.g. Length 250mm, latching in 62.5mm step: $250/62.5 = 4$

 **Order example:**
NT-LM-35-300: drylin® N telescopic rail with locking mechanism, 35mm width, retracted length 300mm

 drylin® stop motion full product range online
► www.igus-asean.com/drylinstopmotion

Telescopic guide for higher loads



- Lubrication and maintenance-free
- Continuously extendable up to 2,000mm (extended length)
- Sliders made of durable high-performance polymers
- Quiet, sliding movement
- Full extension, partial extension and overextension possible



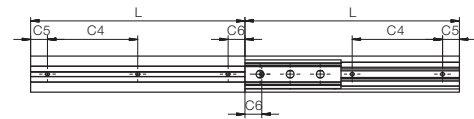
Order key

Type	Size
------	------

N T -60 -200

drylin® N	Telescopic system	Rail width	Length [mm]
-----------	-------------------	------------	-------------

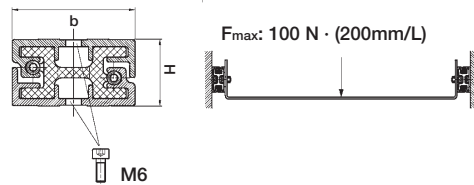
NT-60-"L" – Total extension



NT-60-"L"- "L+max. 20" – overextension

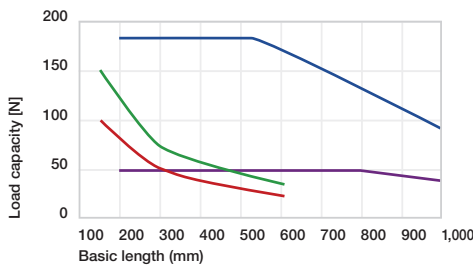


NT-60-"L"- "B" – Partial extension



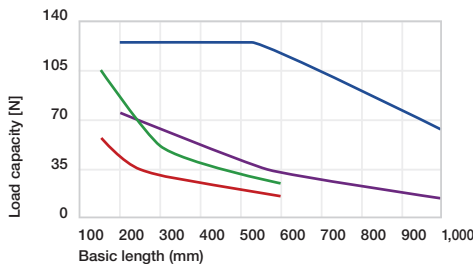
Tip:

F_{max} calculated using this formula allows an easy manual use. Higher loads can be taken up by the system, but need a higher drive force.



- NT-35 limit for manual actuation
- NT-35 structural load limit
- NT-60 limit for manual actuation
- NT-60 structural load limit

drylin® N telescope systems load capacity of a drawer with two systems installed upright



- NT-35 F_{sy}
 - NT-35 F_{sz}
 - NT-60 F_{sy}
 - NT-60 F_{sz}
- drylin® N telescope static load capacity in different load directions

Dimensions [mm]

Part No.	b	H	C4	C5 = C6		L	
				Min.	Max.	Min.	Max.
NT-60-... mm New	60	24	150	25	99.5	200	1,000



drylin® linear technology –
drylin® T rail guides

Robust linear guides

Adjustable bearing clearance

Wear-resistant and durable

Dimensionally identical to recirculating ball-bearing guides

Lubrication and maintenance-free

