

Cable Trolleys and

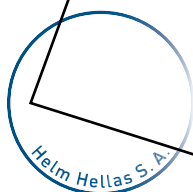
Product Catalogue

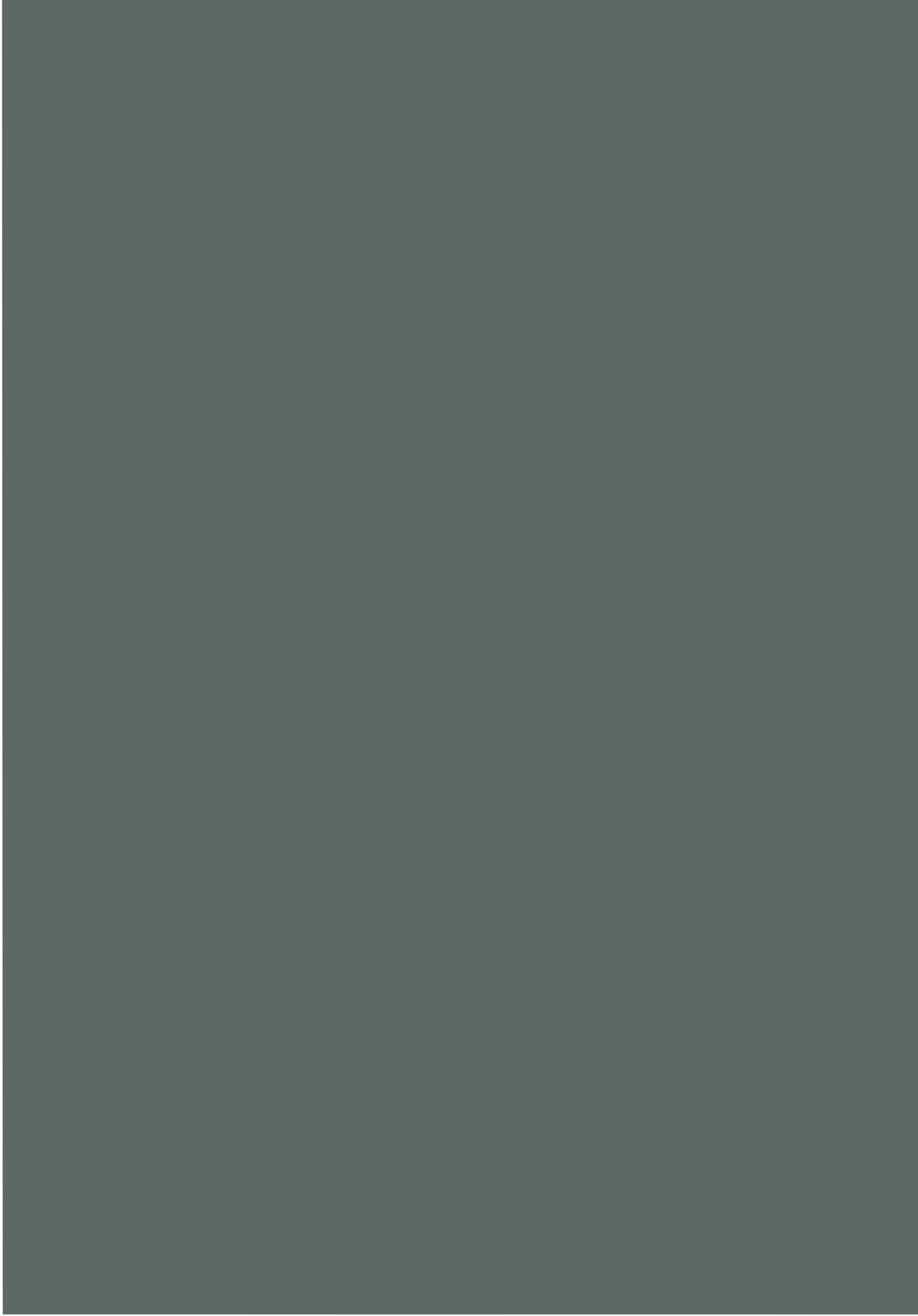
Technical Information
Component Specification





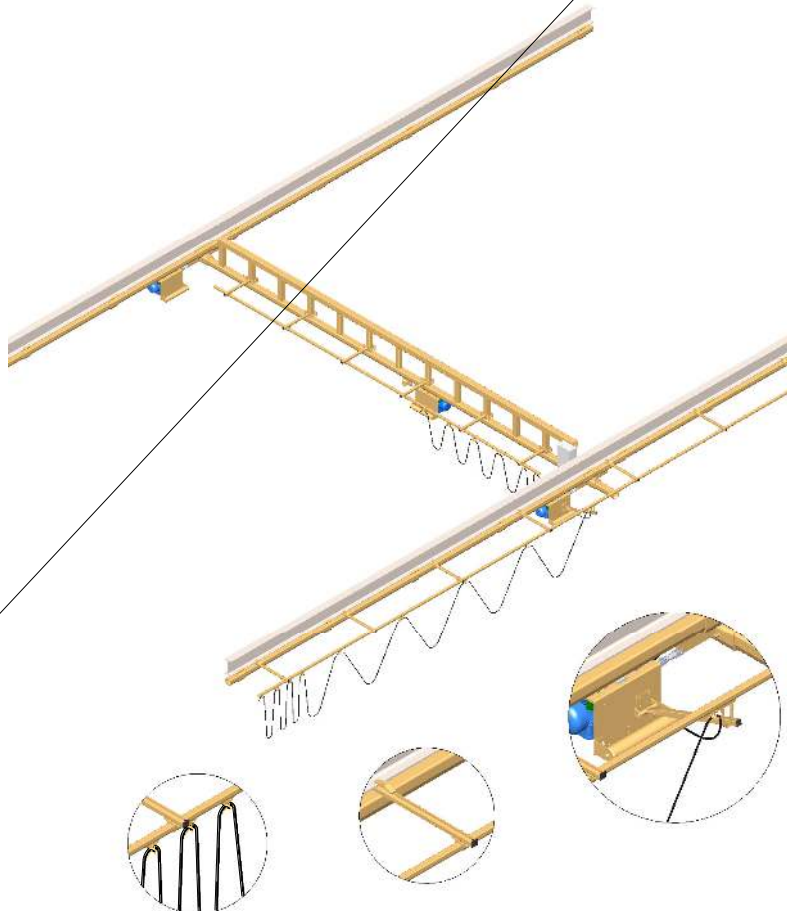
CABLE TROLLEYS AND FESTOON SYSTEMS







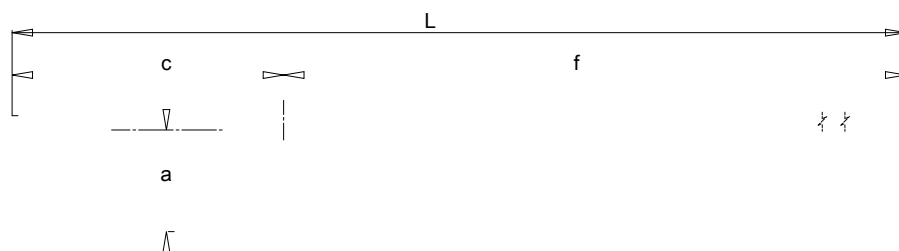
CABLE TROLLEYS AND FESTOON SYSTEMS



Cable Trolleys and Festoon Systems
We reserve the right for technical amendments without obligation.



NIKO conveyor systems for cables or hoses



Calculation of the Track Length ($L=c+f$) and number of cable trolleys

The length of the track **L** is determined by adding the length of movement **f** to the closed parking distance of trolleys **c** (Refer to corresponding table for the dimension of the cable trolleys width). The number of cable trolleys **n** depends on the length of travel and on the required loop depth of cable **a**. The loop depth is governed by the available height between the track and any obstruction or by clients specification. Normally the loop depth is between 0,7 m to 1 m.

Example:

Track length **L** = 16 m, cable loop depth **a** = 0,8 m

Distance between the trolleys = $2 \times a = 2 \times 0,8 = 1,6$ m

Number of the cable trolleys **n** = $16 \text{ m} / 1,6 \text{ m} = 10$ trolleys, one of them being a towing trolley.

The cable section depends on the necessary power supply. Large cable sections have unfavorable bending properties. In this case we recommend to distribute among multiple cables with smaller section sizes.

For round cables: **d** min = 8 mm, **d** max = 60 mm (refer to table).

For flat cables: (**dx**) max = 200 x 50 mm (refer to table).

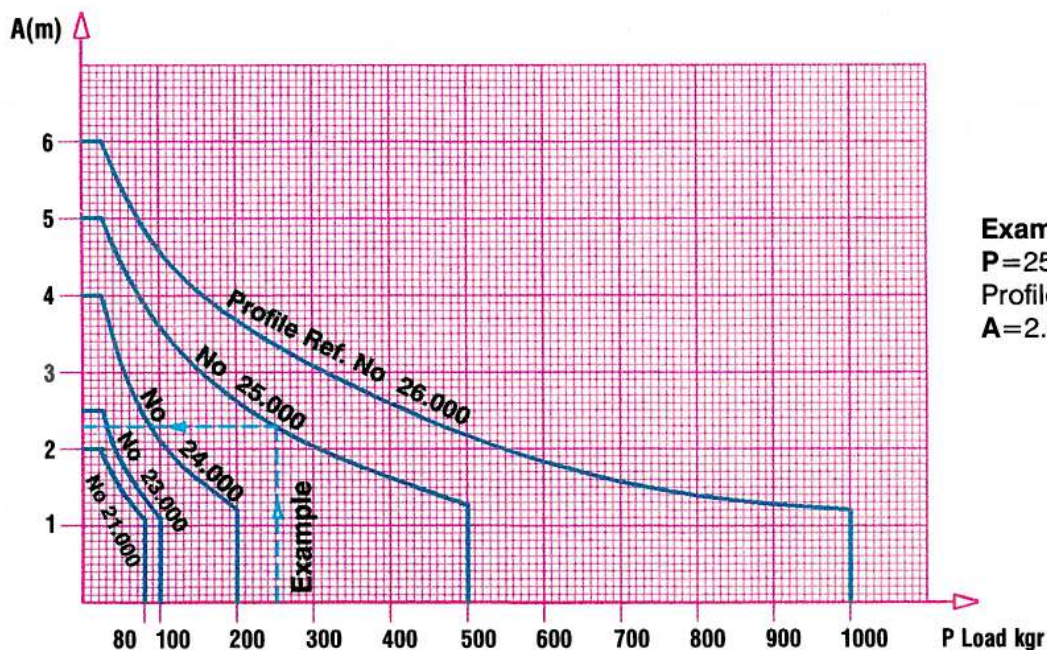
For installations with a high speeds of motion (over 2 m per second) we recommend to use chains, in order to protect the cables.



Calculation of distance between supports

Dimension "A"

NIKO Profile No.	21.000	21.010	23.000	23.010	24.000	25.000	26.000
Max load /m	80kg	70kg	100kg	90kg	200kg	500kg	1000kg
Max load per trolley	10 kg	10 kg	20 kg	20 kg	40 kg	60 kg	80 kg



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NIKO Profile No.	SWL (kg)	Max. load per m of track profile (kg)	Flat cable max dim. (mm)	Round cable max dia. (mm)	Cable trolley s operation temperature C	Cable trolley s speed of motion (m/ min)
21.000						



Application photos



CABLE TROLLEYS
AND FESTOON SYSTEMS



Application photos



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NIKO Pro le No.	Dimensions			
	h (mm)	b (mm)	d (mm)	s (mm)
21.000	28	30	8	1,75
21.050/.070 stainless steel	28	30	8	1,75
23.000	35,00	40,00	11,00	2,75
23.050/.070 stainless steel	35,00	40,00	11,00	2,75
24.000	43,50	48,50	15,00	3,20
24.050/.070 stainless steel	43,50	48,50	15,00	3,20
25.000	60,00	65,00	18,00	3,60



Support bracket

.B00/.B50

This bracket can be used and adapted for specific applications where standard supports are unsuitable.

NIKOPro file No.	21.000	23.000	24.000	25.000	26.000	27.000
Support bracket No. Zinc plated	21.B00	23.B00	24.B00	25.B00	26.B00	27.B00
Support bracket No. Black						

The track sections are joined using the track joint by tightening the top screws first then aligning the profiles by means of the side screws.



NIKO Profile No.	21.000	23.000	24.000	25.000	26.000	27.000
Part No.	21.B02	23.B02	24.B02	25.B02	26.B02	27.B02
L (mm)	90	115	130	171	210	260
h (mm)	39	50	60	81	104	145
b (mm)	40	50	60	8039)/P 52.08)		



Split Support bracket

.B03

This bracket is generally used for variable height configurations.

NIKO Profile No.	21.000	23.000	24.000	25.000	26.000	27.000
Part No.						

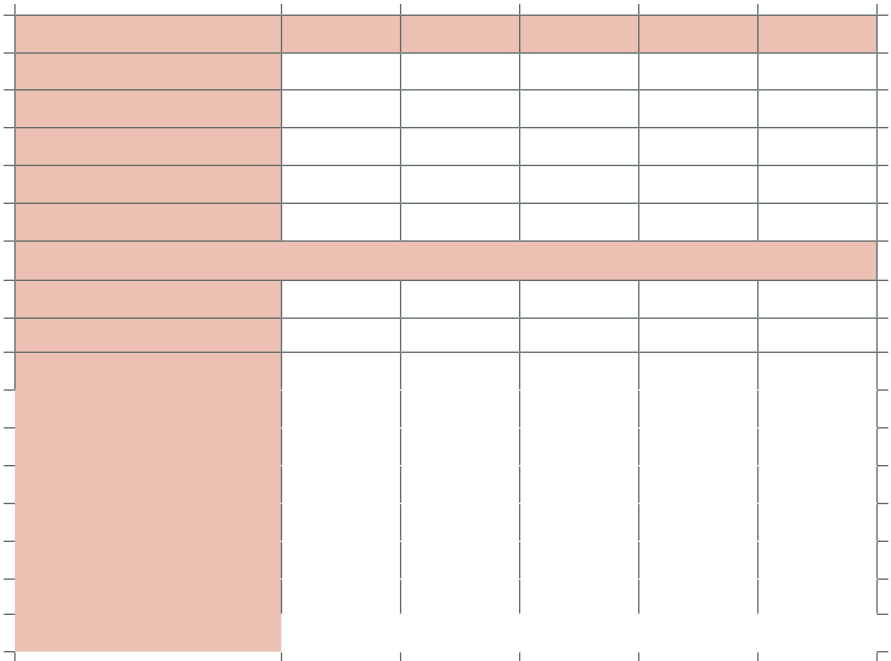
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Split suspension bracket

.B08/.B26

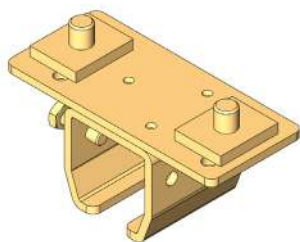
This bracket is used for mounting directly to the underside flange of a parallel I beam.





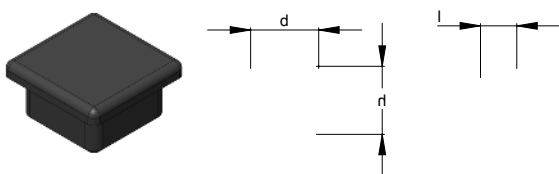
Ceiling support bracket with square nuts

.B62



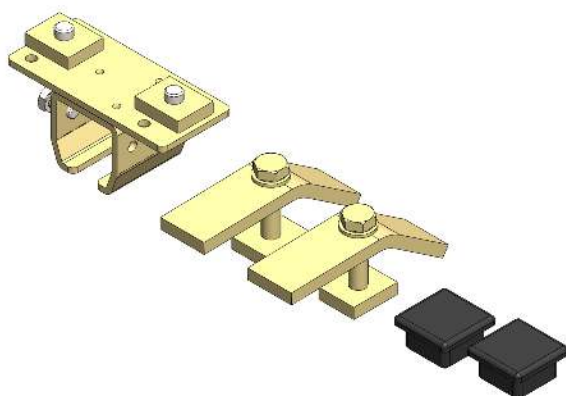
Plastic end cap for track profile 21. & 23.000

X6.130-.330



Set for customized brackets

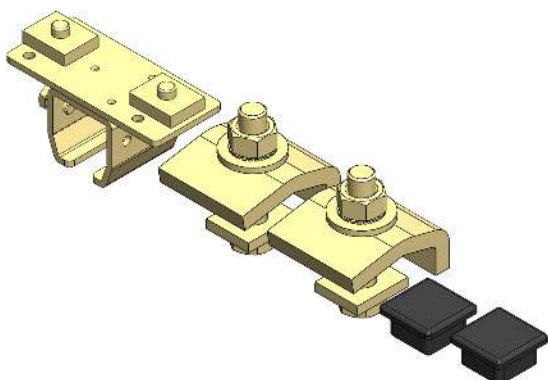
21.Z60



Included in the set:

- support bracket 21.000 x 1
- adjustable suspension bracket (21.B37) x 2
- plastic plugs x 2

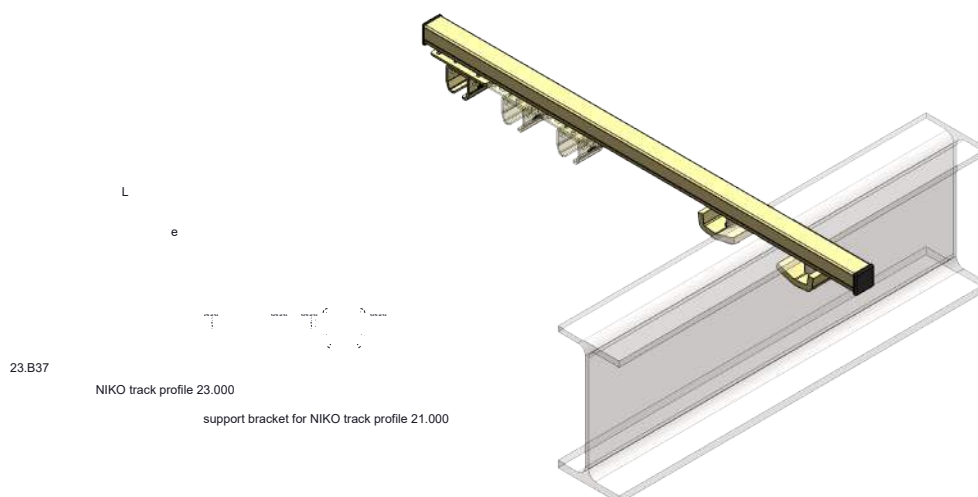
23.Z60

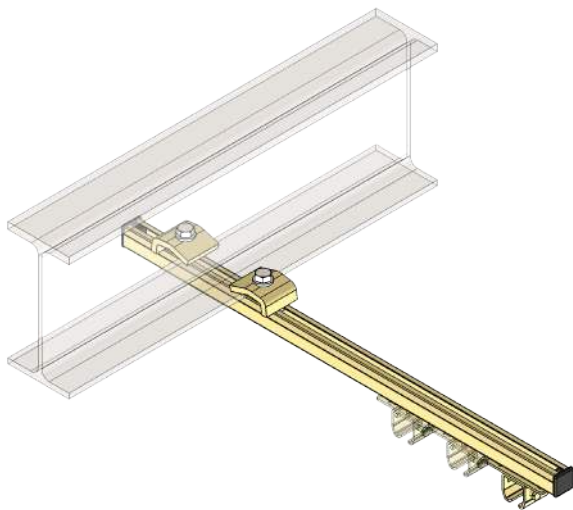


Included in the set:

- support bracket 21.000 x 1
- adjustable suspension bracket (23.B37) x 2
- plastic plugs x 2

Support bracket assembly (top mounting) 23.B60





NIKO track profile 23.000

23.B37

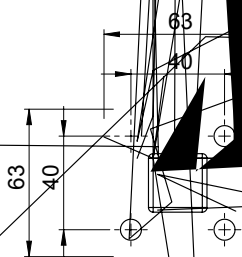
support bracket for NIKO track profile 21.000



e

L

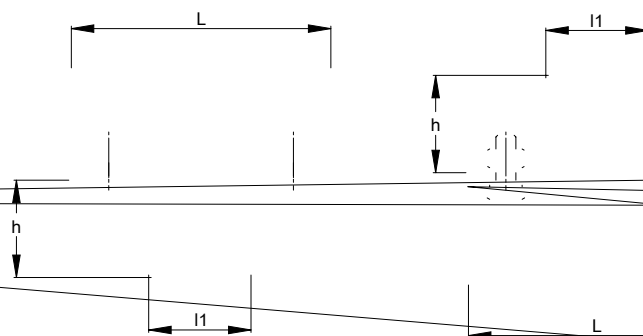
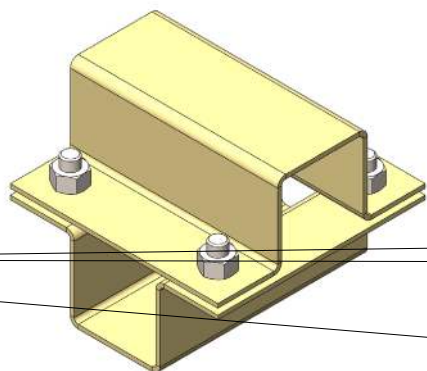
Towing



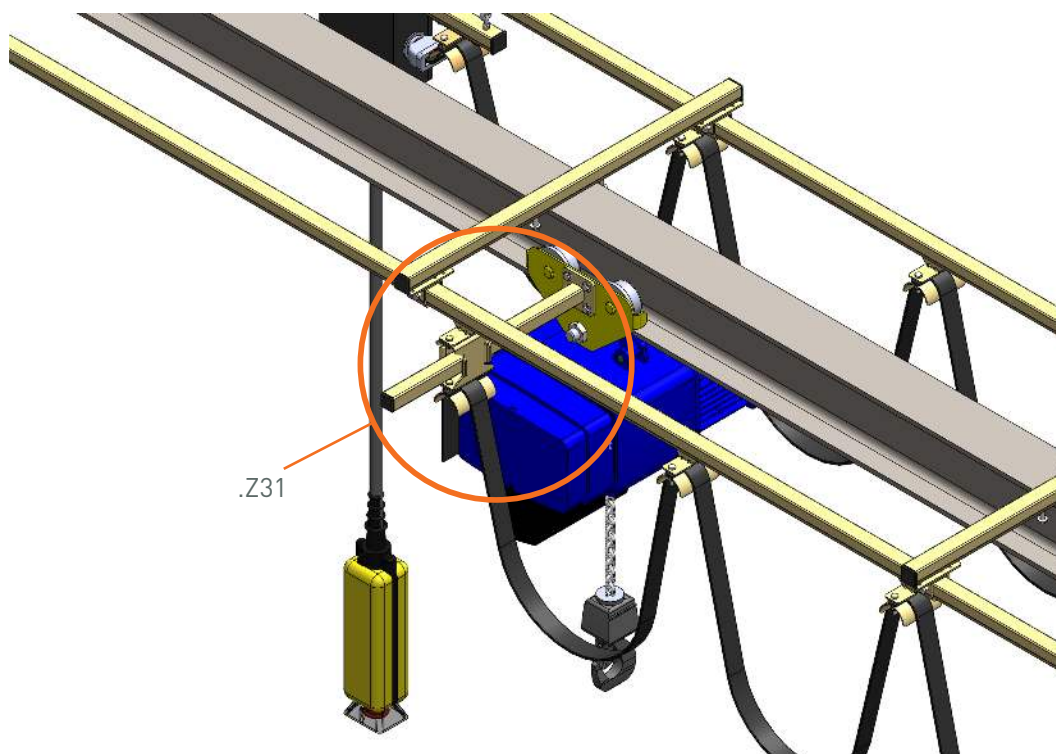


Square tube connector clamp

21.Z61



Towing arm example



NIKO bearing options

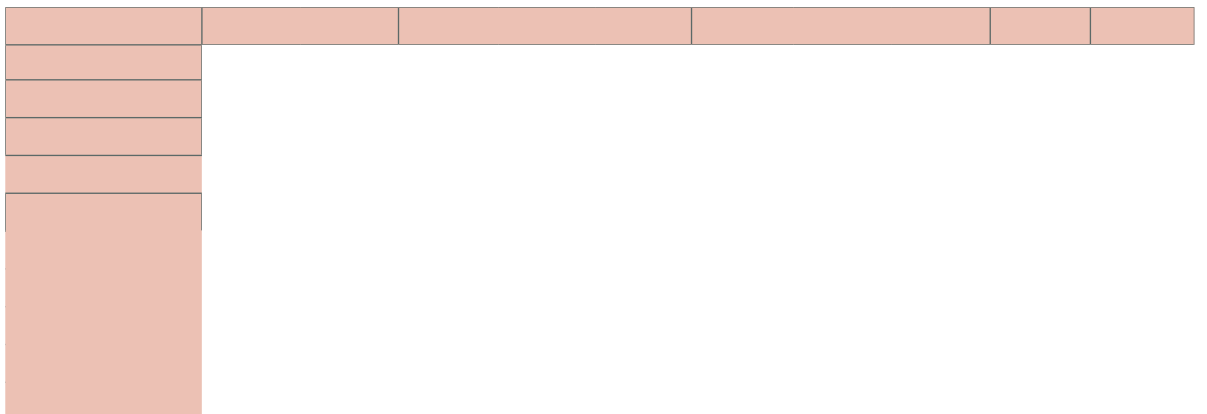
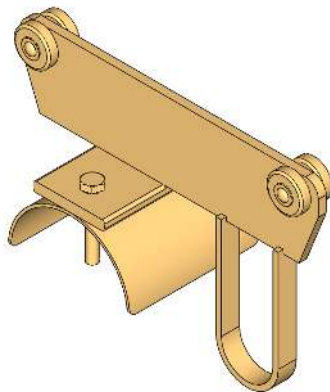
	NIKO-Profile	21.	23.	24.	25.	26.	27.
	Standard bearings for operating temperatures from -20°C to 80°C	21	23	24	25	26	27
	Nylon tyred bearings		PL.23	PL.24	PL.25	PL.26	PL.27
	Heavy duty polyamide tyred bearings		PLN.23	PLN.24	PLN.25	PLN.26	PLN.27
	Phosphor bronze tyred bearing		PB.23	PB.24	PB.25	PB.26	PB.27
	Stainless steel bearings for operating temperatures from -20°C to 80°C	IN.21	IN.23	IN.24	IN.25		



Flat cable towing trolley

.M10/.M13

This trolley is pulled along by means of a towing arm fitted to the travelling device and inserted into the stirrup section of the trolley. It cannot be used on curved tracks.

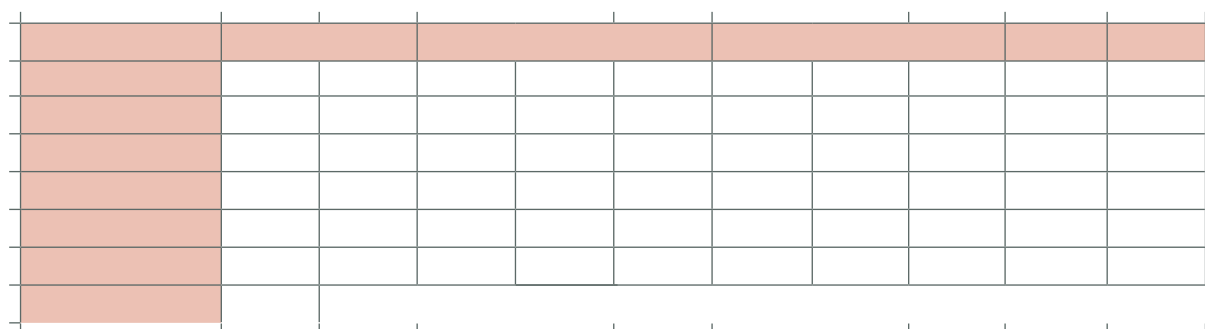




Flat cable end clamp

.K10/.K13

The flat cable end clamps are installed at the end of the conveyor system and guarantee the stability of the cable from the point of electric or hydraulic supply to the driven cable trolley.



Round cable or hose trolley

.L15-.L43

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[illegible]

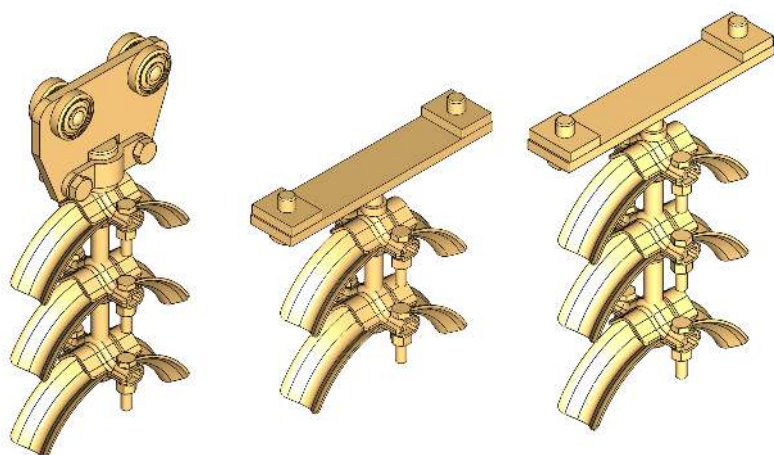
This round cable end clamp is installed at the end of the conveyor system and guarantees the stability of the cable from the point of electric or hydraulic supply to the driven cable trolley.



Individual round cable or hose clamp

.N15-.N43

Several cable clamps of equal or varying diameters can be placed in round cable trolleys. 108

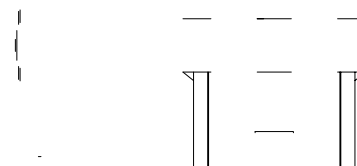
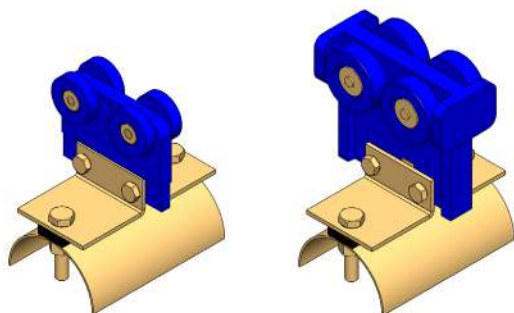




Cable trolley (nylon)

.L01

The cable trolleys are used in electric operated systems for the transport of flexible cables from the fixed power supply to the machine or electric hoist.



NIKOPro le No.	21.000	23.000	24.000	25.000	26.000	27.000
Part No.	23.L01		25.L01		27.L01	
For cable dimensions	flat up to 55x20mm		flat up to 55x20mm		flat up to 55x20mm	
L (mm)	60		80		80	

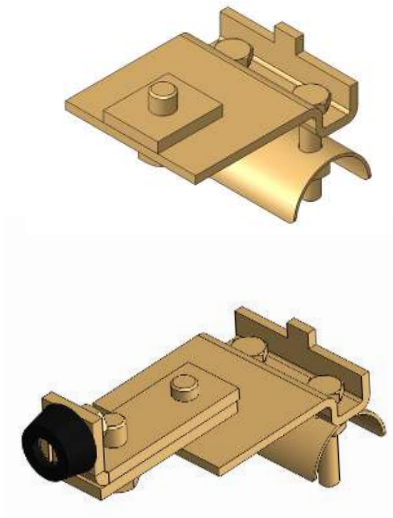


Cable end clamp

.K00/.K02

.K00 refers to the clamp only and .K02 is used as an end stop and cable end clamp combined. It is installed at the power source end of the track.

NIKOPro le No.	23.000	24.000	25.000	26.000	27.000
Part No.	23.K00	24.K00	25.K00	26.K00	27.K00
For cable dimensions	flat up to 55x20mm	flat up to 55x20mm	flat up to 55x20mm	flat up to 55x20mm	flat up to 55x20mm



Track end stop

.X01

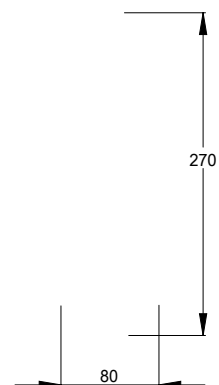
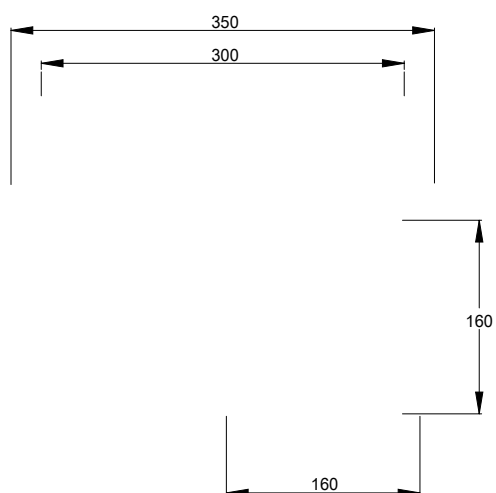
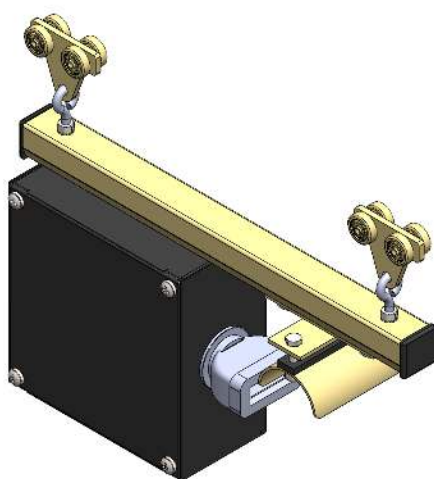
The end stop with a rubber buffer is positioned at the end of the open profiles. Used in conjunction with a fixed cross bolt.

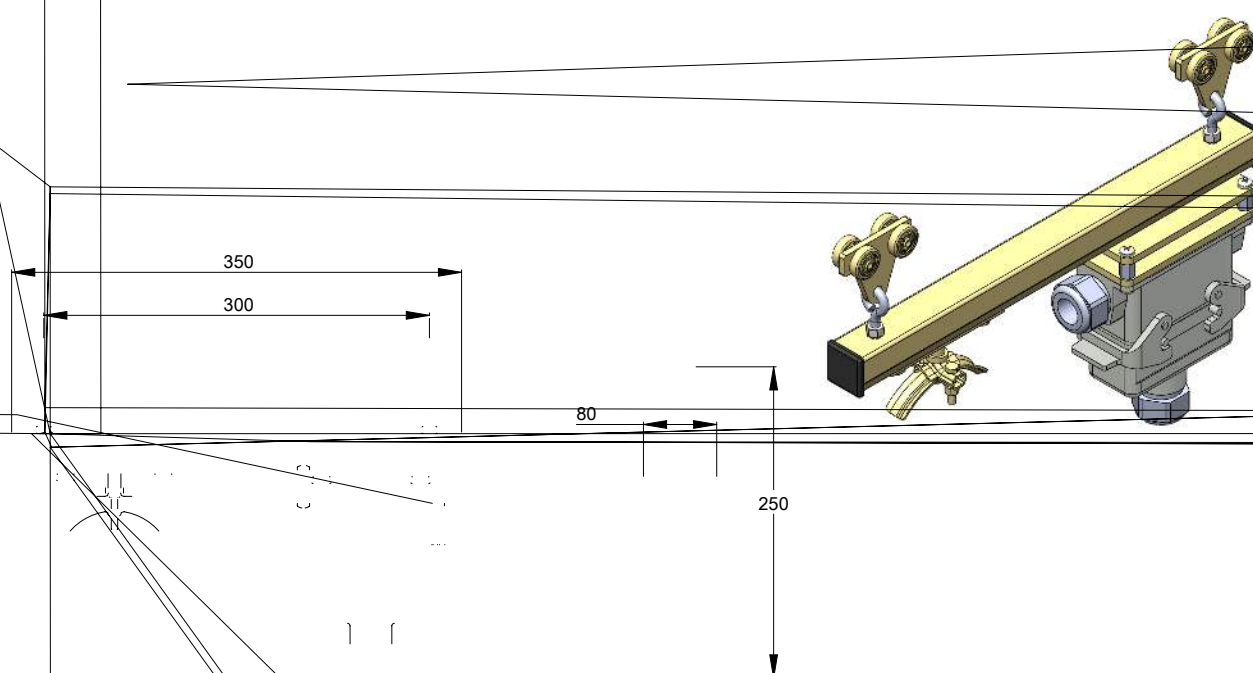
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Remote pendant trolley with terminal 1 - flat cable

.L50





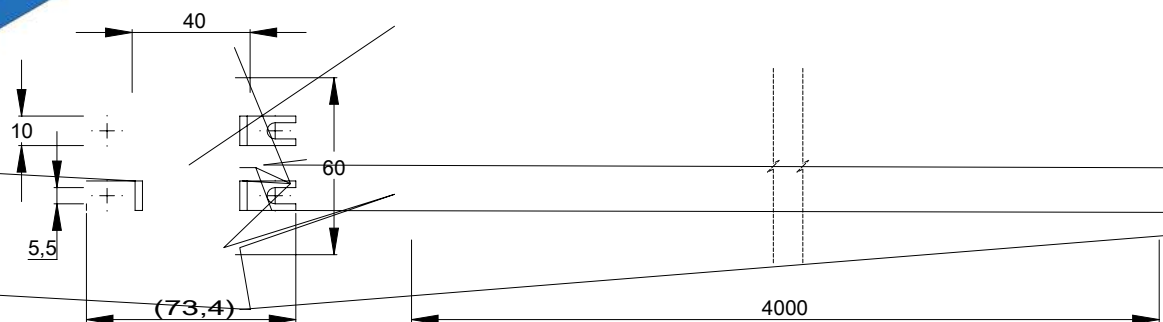
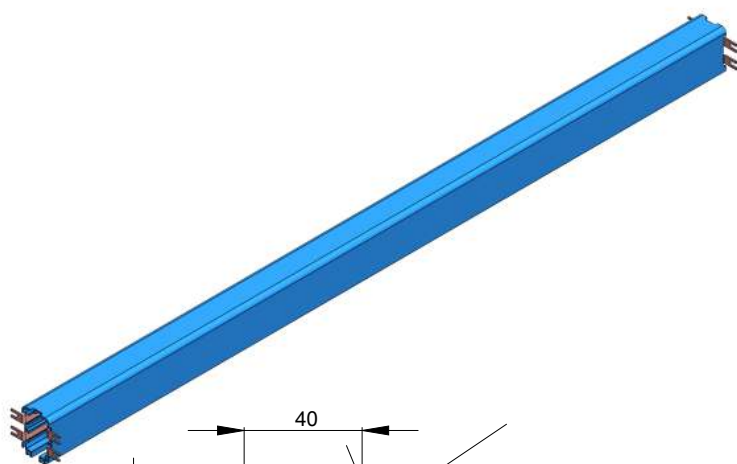
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Conductor bar system

4-Pole conductor bar 4M 60A

TR.001

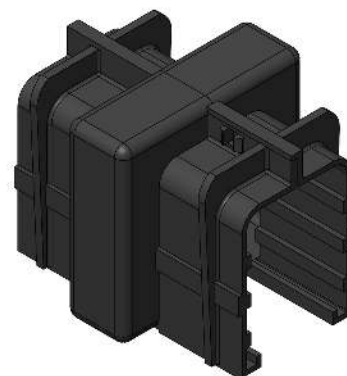




Conductor bar joint cover

TR.002

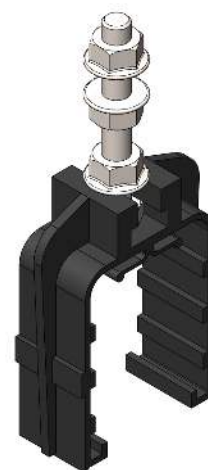
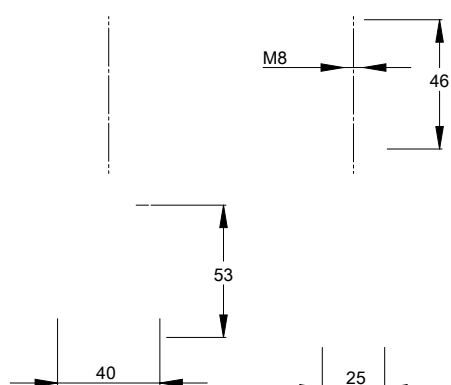
Joints serve the connection between two sections of the insulated conductors and provide mechanical and electrical continuity. Fast assembly



Conductor bar sliding support

TR.003

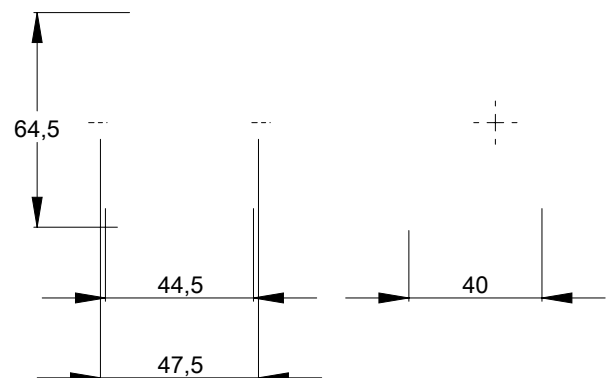
Sliding support serves as hanger clamp for the conductor bar. Fast connection.



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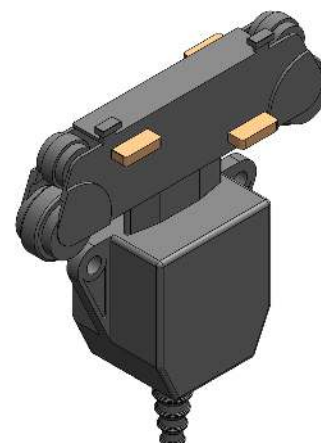
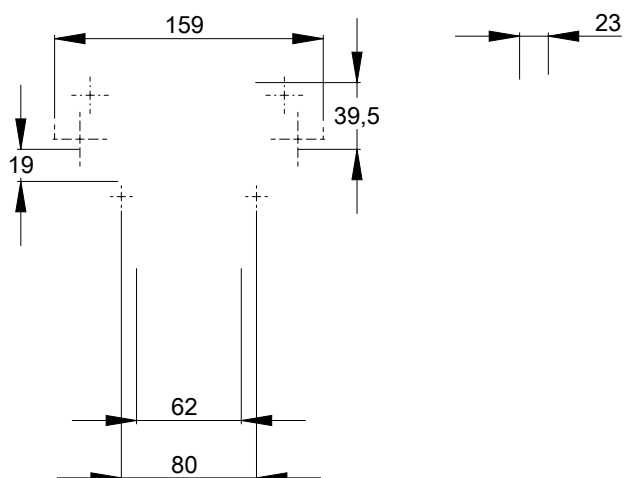


TR.007

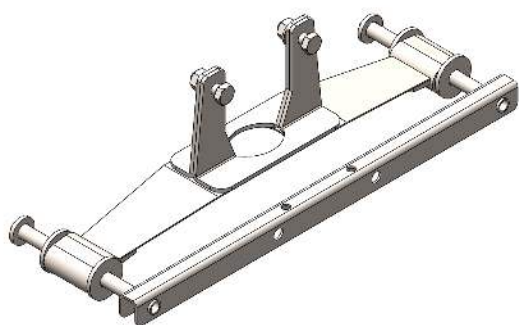


Conductor bar 25AMP collector trolley

TR.008

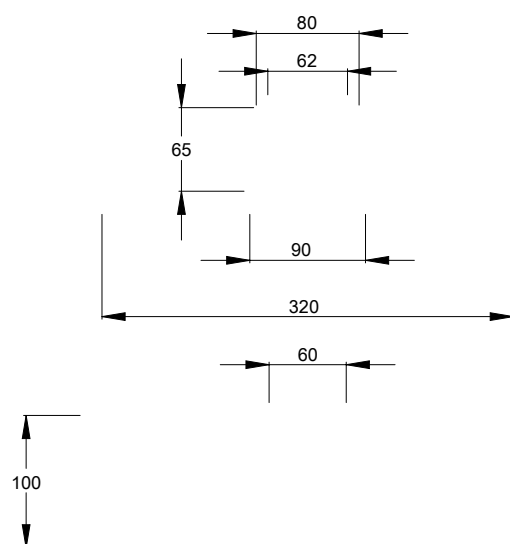


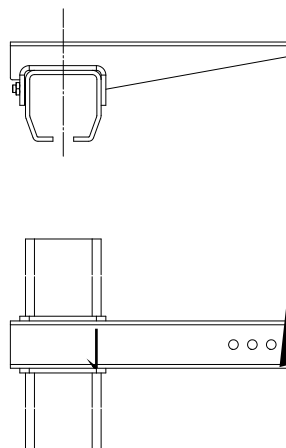
CABLE TROLLEYS
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TR.013



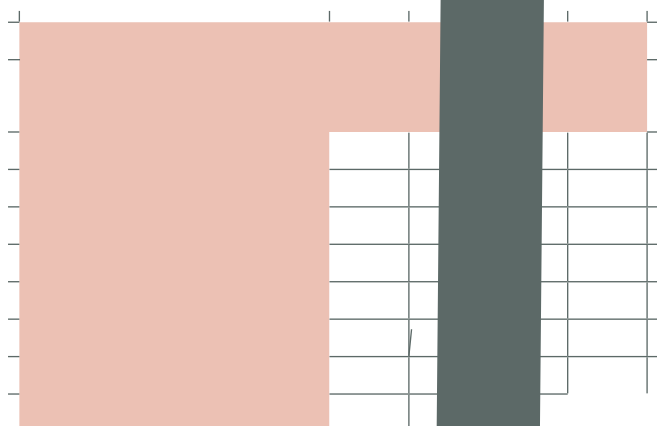


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NIKO Track Profile stainless steel

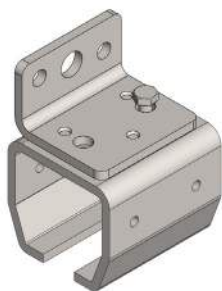


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Wall support bracket, stainless steel

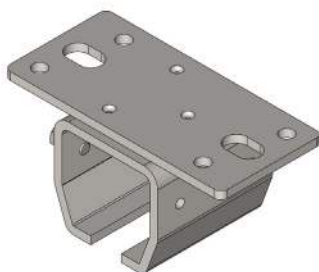
.B01



NIKOPro le No.	21.050/.070	23.050/.070	24.050/.070	25.050/.070
Part No. (304)	51.B01	53.B01	54.B01	55.B01
Part No. (316)	71.B01	73.B01	74.B01	75.B01

Ceiling support bracket, stainless steel

.B02

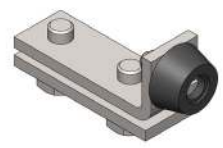


NIKOPro le No.	21.050/.070	23.050/.070	24.050/.070	25.050/.070
Part No. (304)	51.B02	53.B02		



Track end stop, stainless steel

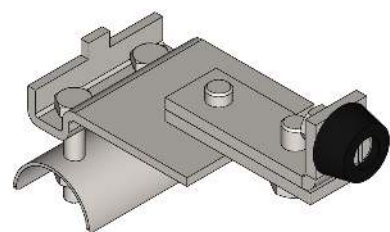
.X01/.X04



NIKOPro le No.	51./71.X04	23.050/.070	24.050/.070	25.050/.070
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Part No. (316)	71.X04	73.X01	74.X01	75.X01

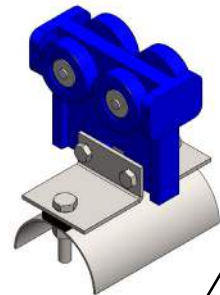
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End stop with cable end clamp, stainless steel .K02



NIKOPro le No.	23.050/.070	24.050/.070	25.050/.070
Part No. (304)	53.K02	54.K02	55.K02
Part No. (316)	73.K02	74.K02	75.K02

Cable trolley (nylon), stainless steel .L01



NIKOPro le No.	23.050/.070	24.050/.070	25.050/.070
Part No. (304)	53.L01	54.L01	55.L01
Part No. (316)	73.L01	74.L01	75.L01



Support bracket assembly (top mounting) , stainless steel

.B60

NIKO Pro le No.	21.050/.070	23.050/.070
Part No. (304)	51.B60	53.B60
Part No. (316)	71.B60	73.X01

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Conductor bar/auxiliary line bracket .Z50/.Z50B from tracks .000 & .045, stainless steel

NIKOPro le No.	24.050/.070	25.050/.070
Part No. (304)	54.Z50	55.Z50
Part No. (316)	74.Z50	75.Z50
Part No. (304)	54.Z50B	55.Z50B
Part No. (316)	74.Z50B	75.Z50B

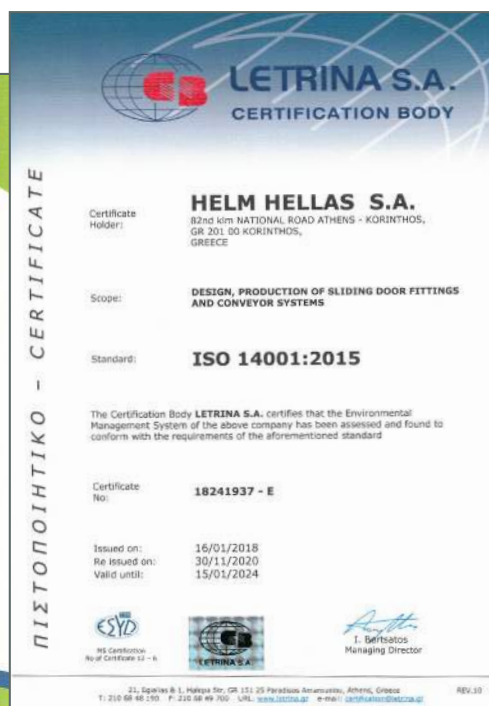
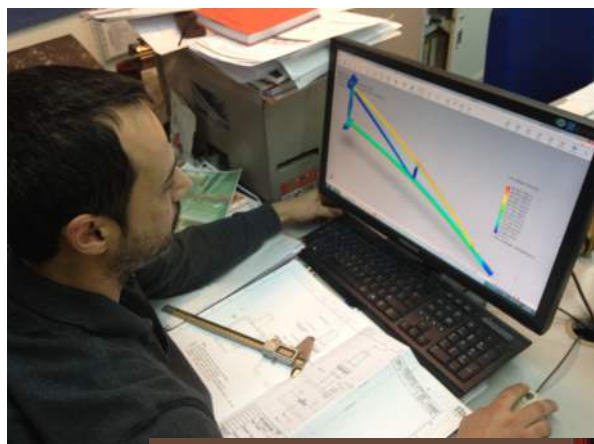






AND FESTOON SYSTEMS

Our quality control department is manned by experienced and highly skilled engineers. Our test lab is equipped with endurance test stands, tensile stress equipment, hardness test machines and other laboratory equipment. Finite Element Analysis is also performed during the developing phase of every component.





Complete product range NIKO:

Light duty sliding door hardware
Heavy duty sliding door hardware
Conveyor systems
Light cranes
Cable trolleys, festoon systems &
conductor bars
Personal fall arrest systems (EN 795)
Accessories for gates and doors