



Cable
conduction
system

Insulating cable ladder

67

raw material
colour

U23X

Grey



67

U23X

Grey

Insulating
cable ladder

For the support and distribution of large-calibre power and communication cables

- Manufactured in recyclable thermoplastic material; no earthing required.
- For indoor and outdoor installations.
- Good performance outdoors and with exposure to UV rays.
- Good resistance to corrosion and chemical environments.
- Sturdy system designed to support full load with distances between supports of 2 and 3 m.

Raw material

U23X

Insulating cable ladder and accessories*

Compliant



* Some of the accessories are made in U48X material. For detailed information see the part numbers chart.

Technical characteristics

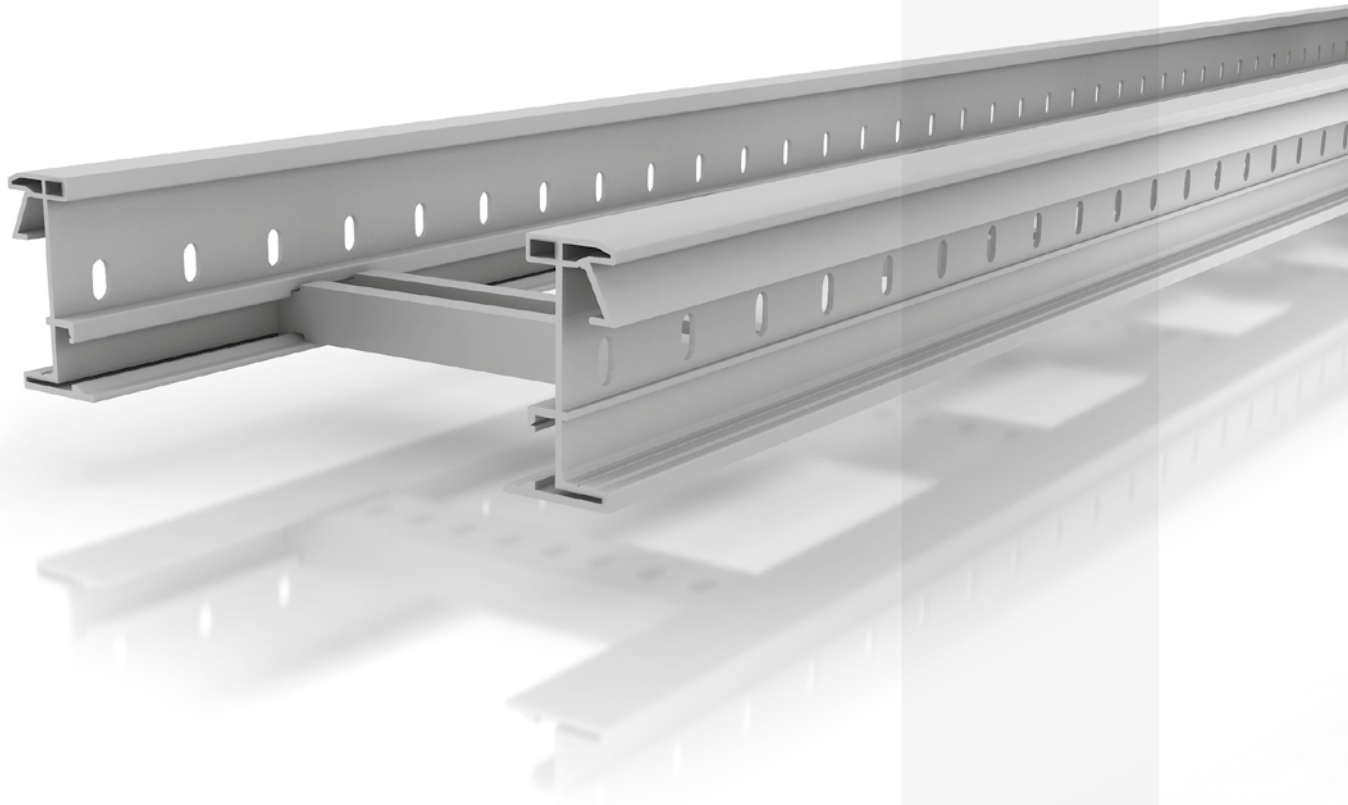
<p>Electrical</p> <p>IEC 61537*</p> <ul style="list-style-type: none"> • Insulating (electrically non-conductive system) • No earthing required 	<p>Load</p> <p>IEC 61537*</p> <ul style="list-style-type: none"> • Load test conditions Test type I: <ul style="list-style-type: none"> · Longitudinal deflection: <math><1\%</math> · Transverse deflection: <math><5\%</math> 	<p>Impact</p> <p>IEC 61537*</p> <ul style="list-style-type: none"> • Impact resistance: 20J at -20°C 	<p>Temperature</p> <p>IEC 61537*</p> <ul style="list-style-type: none"> • Minimum and maximum transport, storage, installation and application temperature: -20°C / +60°C
<p>Corrosion</p> <p>ISO/TR 10358; DIN 8061</p> <ul style="list-style-type: none"> • Good resistance to corrosion and to chemical agents 	<p>Outdoor</p> <ul style="list-style-type: none"> • Good performance with exposure to UV rays 	<p>Fire</p> <p>IEC 61537*</p> <ul style="list-style-type: none"> • Glow-wire test at 960°C. • Non flame propagating <hr/> <p>UNE 201010: 2015</p> <ul style="list-style-type: none"> • Reaction to fire, Class M1 <hr/> <p>UL94</p> <ul style="list-style-type: none"> • Flammability test: V0 • Does not spread fire by dripping 	

* The values indicated according to IEC 61537 have been tested under the equivalent standard EN 61537. BS EN 61537 is the UK implementation of EN 61537 and IEC 61537.

See updated
technical information
of each part number on
www.unex.net

Insulating
cable ladder

67 **U23X**
Grey



Length

3 m

Colour

Grey

RAL 7035

Conformity declaration



67

U23X

Grey

Insulating
cable ladder



Chemical industry



Water treatment: desalination plant



Chemical industry



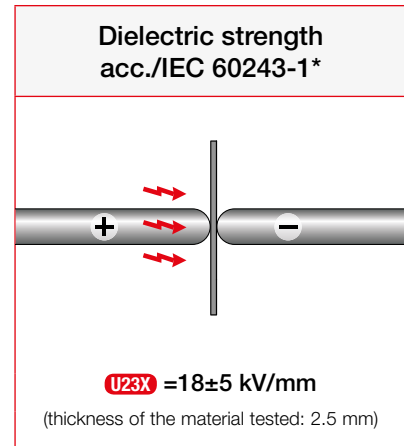
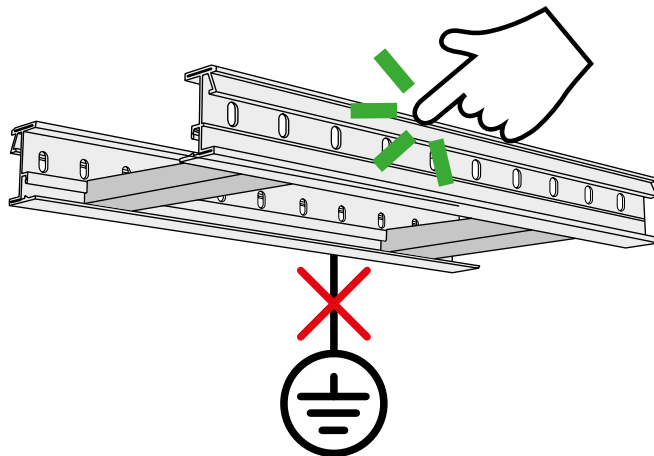
Polyester industry



Chemical industry

Insulating material: maximum electrical safety

Electrical insulation is maintained over time.



* The values indicated according to IEC 60243-1 have been tested under the equivalent standard EN 60243-1. BS EN 60243-1 is the UK implementation of EN 60243-1 and IEC 60243-1.

Advantages	Benefits
No earthing required	<p>Increased protection for people and cables.</p> <p>Cost saving due to the ease of the installation, project management and maintenance.</p>
No equipotential bonding is needed	
Without transmission of dangerous currents.	
Effective electrical separation of conductors with different assigned voltages by using a divider.	
No possibility of short circuit due to contact of damaged phases with the cable ladder.	
Does not require maintenance for earthing nor corrosion.	

Unalterable against corrosion

The raw material of the Insulating cable ladder 67 and accessories* in U23X has an excellent behaviour in front of corrosion, endorsed by more than 40 years of experience with the Insulating cable tray 66.

This resistance is ensured by the raw material in itself; it is not achieved by applying a coating to the final product. Therefore, the corrosion protection remains unchanged:

- In the course of time.
- After cutting, drilling and manual processing the material in the worksite.

The behaviour in chemical environments of Unex insulating materials is defined by DIN 8061 and ISO/TR 10358 standards depending on the chemical agent, concentration and temperature.

* Some of the accessories are made in U48X material. For detailed information see the part numbers chart.



According to Cable tray standard **IEC 61537*:2007** resistance to humid and saline corrosion



Unex insulating materials **"are inherently resistant to corrosion and do not require testing."**

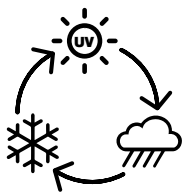
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Good performance outdoors and with exposure to UV rays

Raw material formulation suitable for UV rays exposure. More than 40 years' experience in outdoor installations.

Unex insulating cable ladders are designed to absorb linear expansion.

The "**d**" distance between two lengths varies depending on the difference between the maximum temperature and the installation temperature.



Separation between lengths	
ΔT (°C)	d (mm)
20	5
30	7
40	9
50	11

$\Delta T = T_{\max} - T_{\text{inst.}}$



67

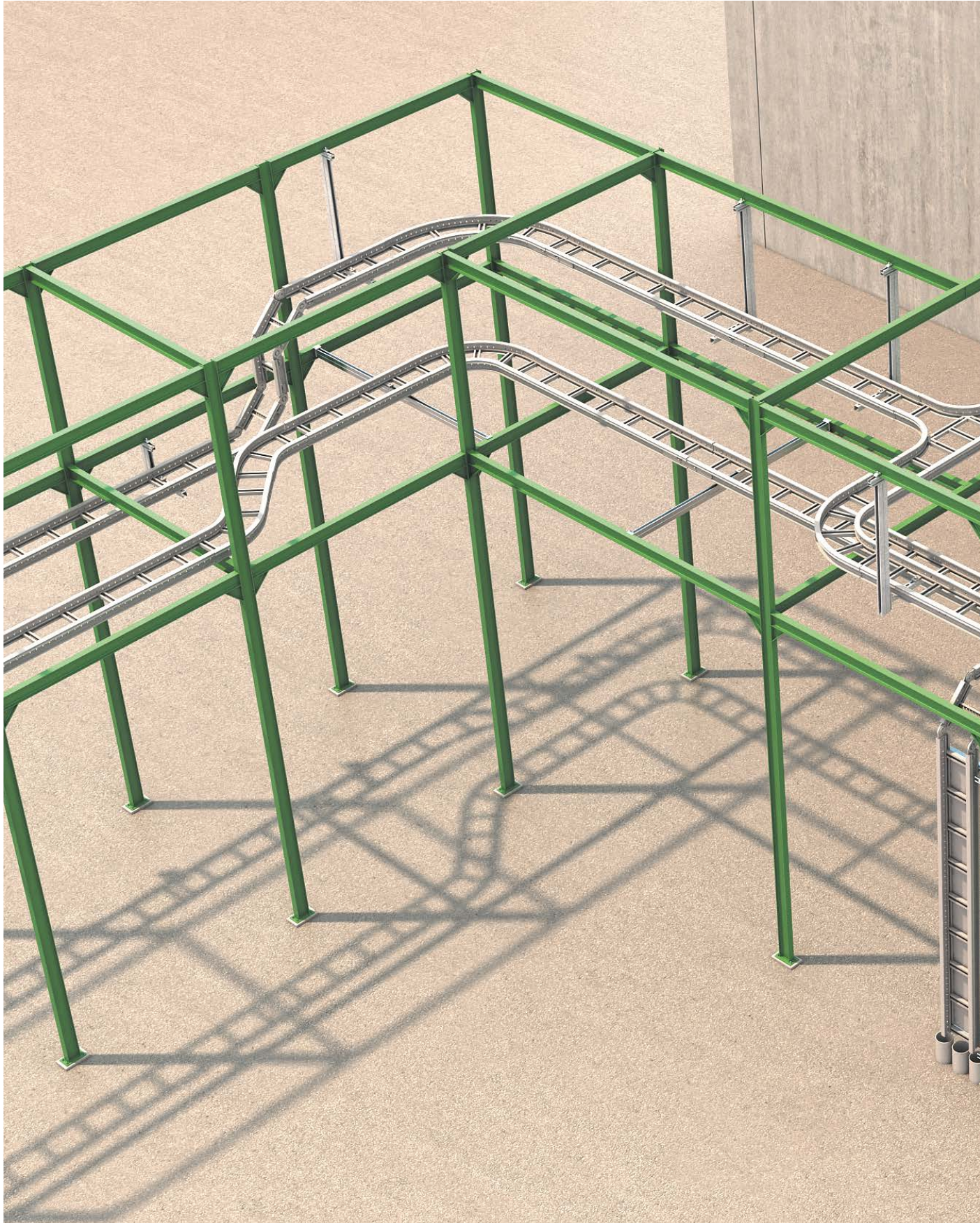
U23X

Grey

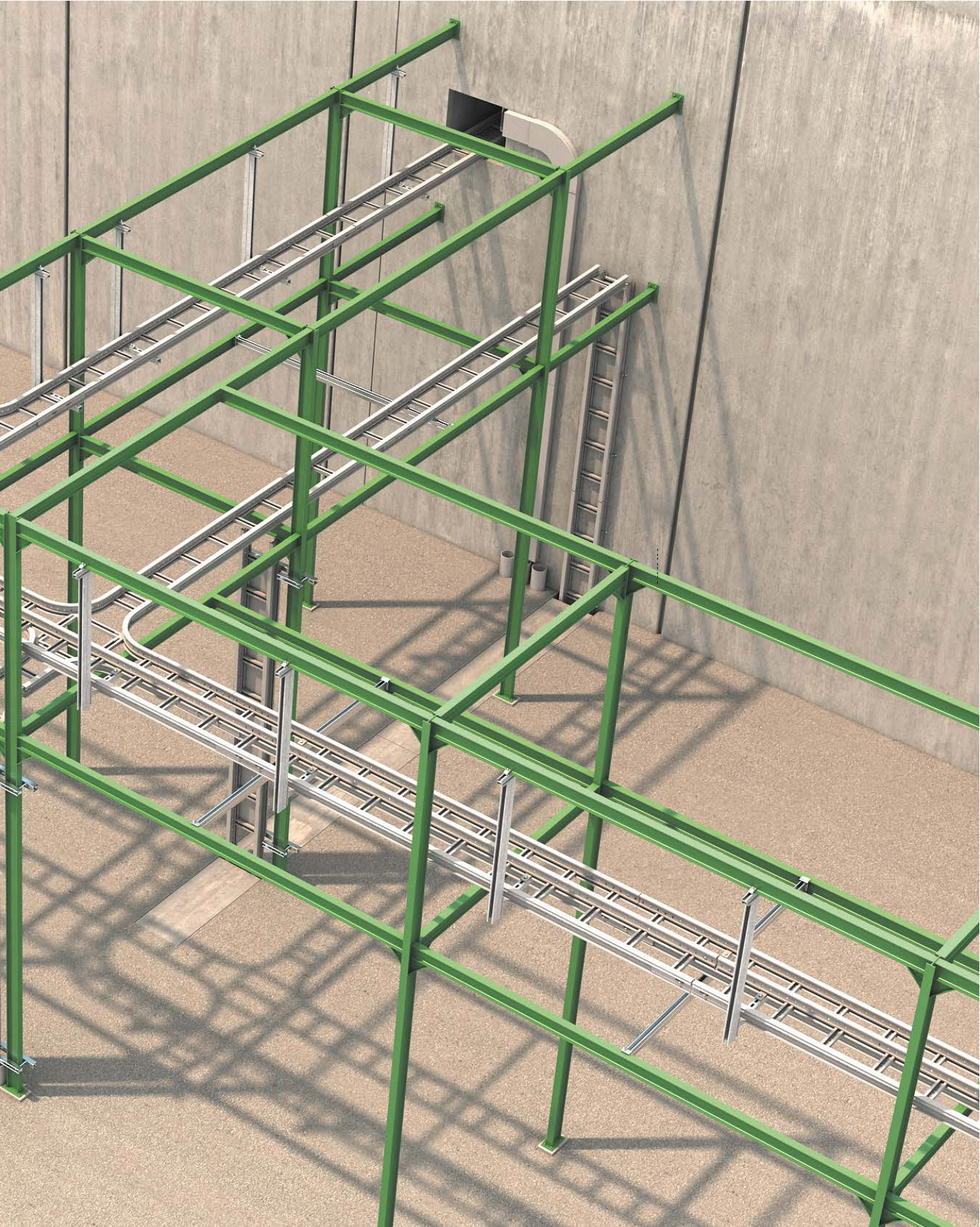
Insulating
cable ladder

Overview of the product family

The solution for industrial installations



Safe, easy and quick mounting



67

U23X

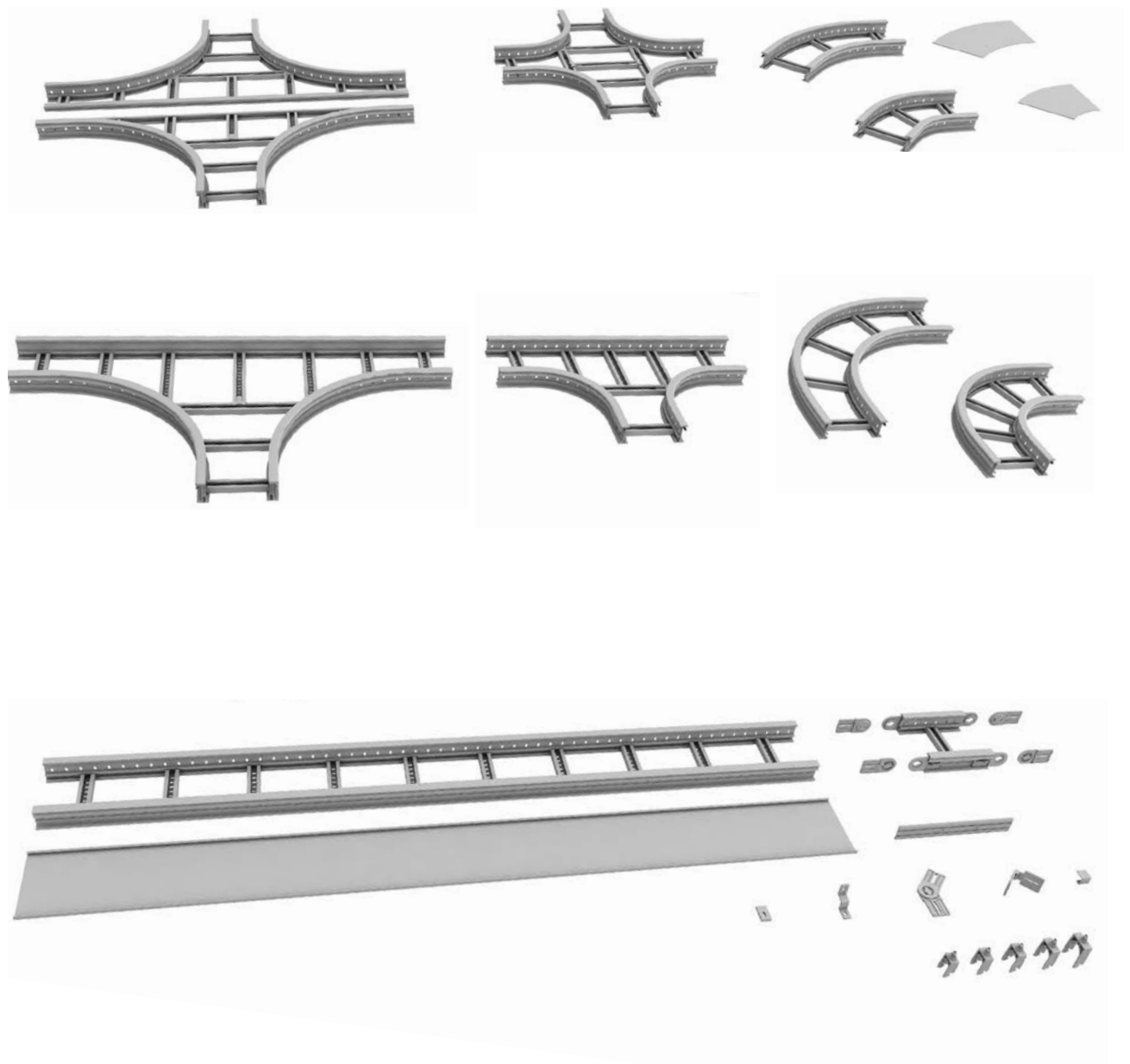
Grey

Insulating
cable ladder

Easy installation

Unex offers a complete system of elements of form to facilitate the installation of the cable ladder on site:

- Kit type system that simplifies the assembly of the cable ladder.
- Form elements ready to mount. The junctions are available in 2 standard bending radii: 300 and 600 mm.

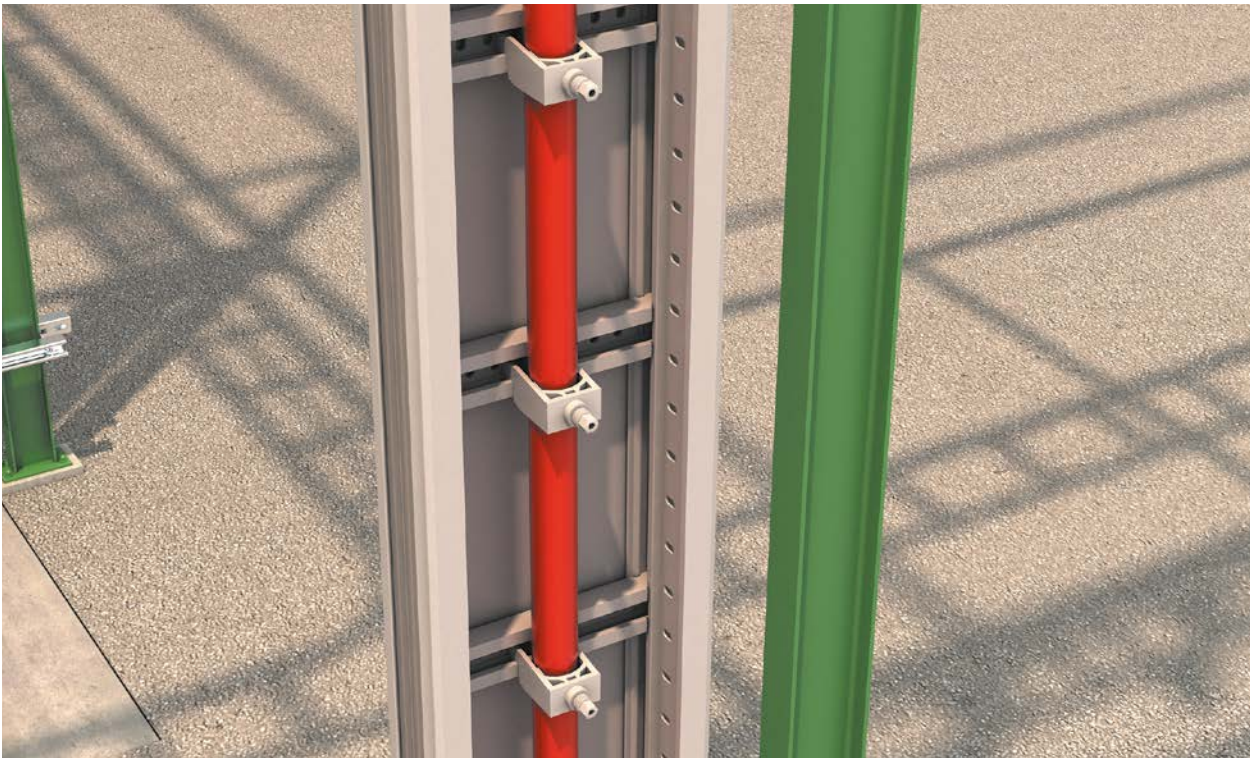


Fast and safe installation

- The cutting, drilling and handling of insulating material does not produce burrs, sparks or irritating dust.
- No welding is needed for mounting.
- The mounting time is reduced and the durability of the tools is increased.



Fast-to-mount junctions.



Cable cleats available for various diameters.

External sizes (mm)	85x200	85x300	85x400	85x500
Dimensions (mm)				

Insulating cable ladder 67 Grey RAL 7035

	Insulating cable ladder	67200-04	67300-04	67400-04	67500-04
	Cover	66202	66302	66402	66502

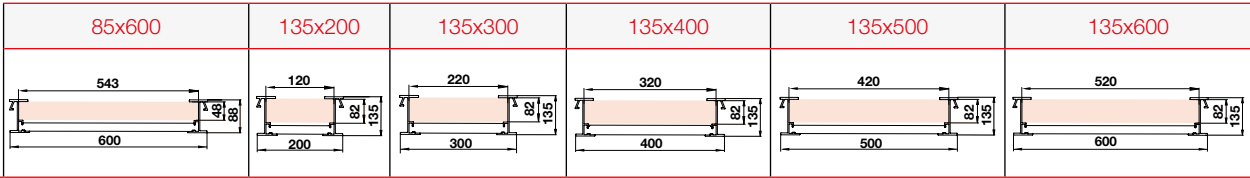
Junction parts

	Junction (1)	67825-04			
	Nuts and bolts (M 8 DIN 603 ISO 8677)	+ 66809			
	Horizontal hinge	67844-04			
	Nuts and bolts (M 8 DIN 603 ISO 8677)	+ 66809			
	Vertical hinge	67813-04			
	Nuts and bolts (M 8 DIN 603 ISO 8677)	+ 66809			
	Divider 3 m	66821			
	Nuts and bolts (M 8x25 DIN 6921)	+ 66829			
		+ 66819			
	Insulating protector for plug	+ 66819			

Cable conduction parts

	Adjustable vertical bend	67212-04	67312-04	67412-04	67512-04
	Nuts and bolts (M 8 DIN 603 ISO 8677)	+ 66809			
	Corner 90° R300	67206-04	67306-04	67406-04	67506-04
	Nuts and bolts (M 8 DIN 603 ISO 8677)	+ 66809			
	Corner 90° R600	67207-04	67307-04	67407-04	67507-04
	Nuts and bolts (M 8 DIN 603 ISO 8677)	+ 66809			

(1) Part numbers 67825-04 and 67834-04 require 2 screws to fix the cable ladder. Part number 67835-04 requires 4 screws.



67600-04	67220-04	67320-04	67420-04	67520-04	67620-04
66602	66202	66302	66402	66502	66602

67825-04	67834-04	67835-04
+	+	+
66809	66839	
67844-04	67854-04	
+	+	
66809	66839	
67813-04	67833-04	
+	+	
66809	66839	
66821	66831	
+	+	
66829	66829	
+	+	
66819	66819	

67612-04	67232-04	67332-04	67432-04	67532-04	67632-04
+	+	+	+	+	+
66809	66839				
67606-04	67226-04	67326-04	67426-04	67526-04	67626-04
+	+	+	+	+	+
66809	66839				
67607-04	67227-04	67327-04	67427-04	67527-04	67627-04
+	+	+	+	+	+
66809	66839				

See next page

External sizes (mm)	85x200	85x300	85x400	85x500
Dimensions (mm)				

Insulating cable ladder 67 Grey RAL 7035

	Insulating cable ladder	67200-04	67300-04	67400-04	67500-04
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Cable conduction parts

	Corner 45° R300	67216-04	67316-04	67416-04	67516-04
+ 8 x	Nuts and bolts (M 8 DIN 603 ISO 8677)	66809			
	Corner 45° R600	67217-04	67317-04	67417-04	67517-04
+ 8 x	Nuts and bolts (M 8 DIN 603 ISO 8677)	66809			
	Corner cover 45° R300 (1)	67214-04	67314-04	67414-04	67514-04
	Corner cover 45° R600 (1)	67215-04	67315-04	67415-04	67515-04
	T branch R300	67218-04	67318-04	67418-04	67518-04
+ 12 x	Nuts and bolts (M 8 DIN 603 ISO 8677)	66809			
	T branch R600	67219-04	67319-04	67419-04	67519-04
+ 12 x	Nuts and bolts (M 8 DIN 603 ISO 8677)	66809			
	Crossover R300	67208-04	67308-04	67408-04	67508-04
+ 16 x	Nuts and bolts (M 8 DIN 603 ISO 8677)	66809			
	Crossover R600	67209-04	67309-04	67409-04	67509-04
+ 16 x	Nuts and bolts (M 8 DIN 603 ISO 8677)	66809			

(1) Include Cover fixings part no. 67845-48.

85x600	135x200	135x300	135x400	135x500	135x600



67600-04	67220-04	67320-04	67420-04	67520-04	67620-04
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67616-04	67236-04	67336-04	67436-04	67536-04	67636-04
+	+	+	+	+	+
66809	66839				
67617-04	67237-04	67337-04	67437-04	67537-04	67637-04
+	+	+	+	+	+
66809	66839				
67614-04	67214-04	67314-04	67414-04	67514-04	67614-04
67615-04	67215-04	67315-04	67415-04	67515-04	67615-04
67618-04	67238-04	67338-04	67438-04	67538-04	67638-04
+	+	+	+	+	+
66809	66839				
67619-04	67239-04	67339-04	67439-04	67539-04	67639-04
+	+	+	+	+	+
66809	66839				
67608-04	67228-04	67328-04	67428-04	67528-04	67628-04
+	+	+	+	+	+
66809	66839				
67609-04	67229-04	67329-04	67429-04	67529-04	67629-04
+	+	+	+	+	+
66809	66839				

See next page



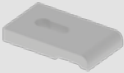











67

U23X


Grey

Insulating
cable ladder

Fixing parts in **U48X** Grey **RAL 7038**

 +  + 	Support fixing		67812-48
	Nuts and bolts (M 8x25 DIN 6921)	SST AISI 304	66829
	Insulating protector for plug	LDPE Grey RAL 7035	66819
 + 	Hold-down bracket		67822-48
	Nuts and bolts (M 8x25 DIN 603 ISO 8677)	SST AISI 304	66839
	Cover fixing		67845-48
	Raised cover clamp		67855-48
	Cable cleat Ø28 to 34 mm		67741-48
	Cable cleat Ø34 to 40 mm		67751-48
	Cable cleat Ø40 to 46 mm		67761-48
	Cable cleat Ø46 to 52 mm		67771-48
	Cable cleat Ø58 to 64 mm		67791-48

Strut channel compatible with all Cable cleats

	Strut channel	U23X	60202-04
		U48X	60202-48



67812-48

+

66829

+

66819

67822-48

66839

67845-48

67855-48

67741-48

67751-48

67761-48

67771-48

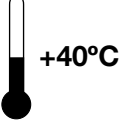
67791-48

60202-04

60202-48

Technical data

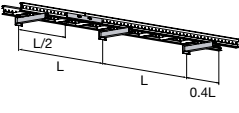
Temperature



+40°C

SWL EN 61537:2007
IEC 61537*:2006

Load

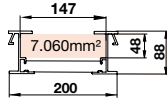
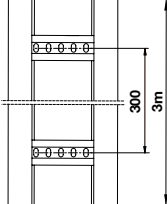
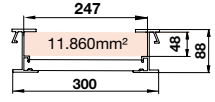
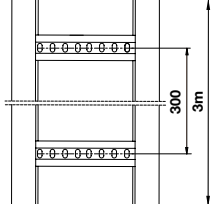
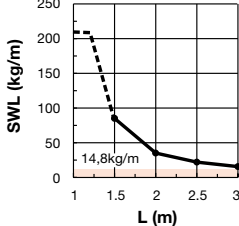
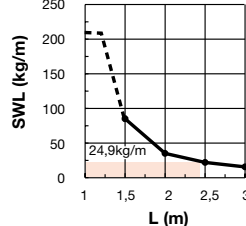


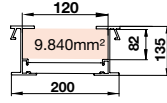
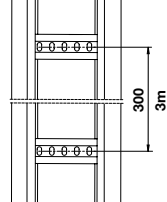
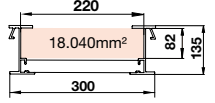
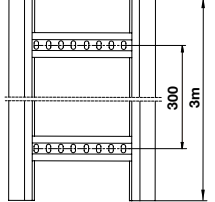
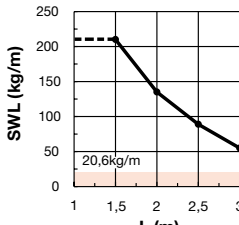
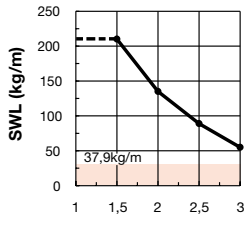
IEC 61537*

- Load test conditions

Test type I:

- Longitudinal deflection: <1%
- Transverse deflection: <5%

	67200-04	67300-04
H: 85 mm	 	 
		

	67220-04	67320-04
H: 135 mm	 	 
		

Full load
Useful cross section = 0.0021kg/mm²

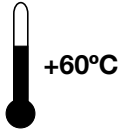
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67400-04	67500-04	67600-04

67420-04	67520-04	67620-04

Technical data

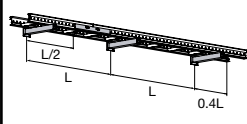
Temperature



+60°C

SWL EN 61537:2007
IEC 61537*:2006

Load

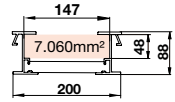
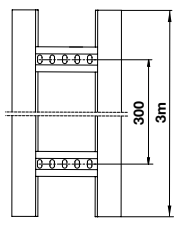
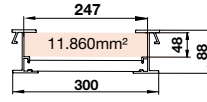
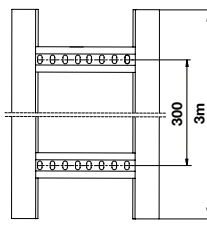
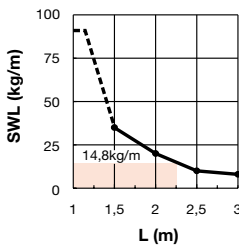
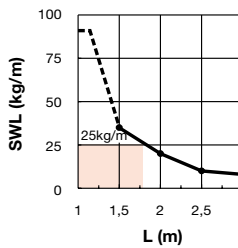


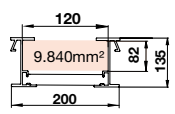
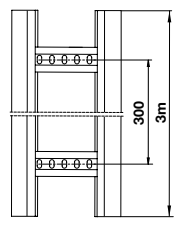
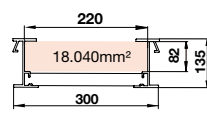
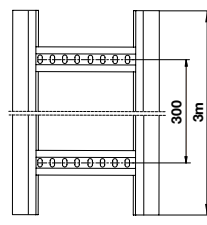
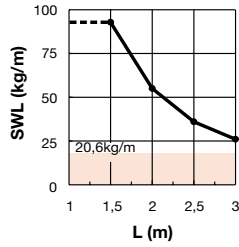
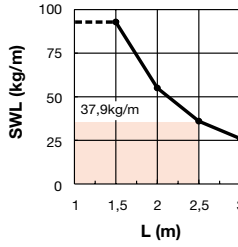
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67420-04	67520-04	67620-04

