



Valdinox

THE CABLE TRAY COMPANY

Technical Datasheet

EC100 EASYCONNECT

Wire Mesh Cable Tray

EASYCONNECT[®]
BASKET TRAY



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Valdinox SL, sociedad española inscrita en el Registro Mercantil de Cantabria al Tomo 514, Folio 13, Hoja 4853, NIF E5839336615 y domicilio en La Venera 14, Arnuero, Cantabria CP 39194



Villanueva, 12 - San Mamés de Meruelo (39192) Cantabria, España
 Tel: (+34) 942 677 135 - (+34) 942 674 992
 Fax: (+34) 942 637 901 - (+34) 942 677 020
 valdinox@valdinox.com - export@valdinox.com - www.valdinox.com



1. General Characteristics

Product references: EC100.100; EC100.150; EC100.200; EC100.300; EC100.400; EC100.450; EC100.500; EC100.600

Definition: Wire mesh basket cable tray made of welded steel wire mesh

Ref. Code	H (mm)	W (mm)	Wire Ø (mm)	S _m (mm ²)	S _u (cm ²)	Weight (Kg/m)	SWL(*) (N/m)
EC100.100EZ	108	102	3,9	95,57	89,94	1,041	433
EC100.150EZ	108	152	4,3	116,18	139,79	1,324	441
EC100.200EZ	108	202	4,3	145,22	191,64	1,611	462
EC100.300EZ	108	302	4,3/4,8	174,26	292,88	2,102	504
EC100.400EZ	108	402	4,6/4,8	232,67	395,46	2,707	546
EC100.450EZ	108	452	4,6/4,8	232,67	447,06	2,782	567
EC100.500EZ	108	502	4,6/4,8	265,90	498,66	3,115	588
EC100.600EZ	108	602	4,6/4,8	299,14	601,86	3,523	630
EC100.100HDG	108	102	3,9	95,57	89,94	1,197	433
EC100.150HDG	108	152	4,3	116,18	139,79	1,523	441
EC100.200HDG	108	202	4,3	145,22	191,64	1,853	462
EC100.300HDG	108	302	4,3/4,8	174,26	292,88	2,417	504
EC100.400HDG	108	402	4,6/4,8	232,67	395,46	3,113	546
EC100.450HDG	108	452	4,6/4,8	232,67	447,06	3,199	567
EC100.500HDG	108	502	4,6/4,8	265,90	498,66	3,582	588
EC100.600HDG	108	602	4,6/4,8	299,14	601,86	4,051	630
EC100.100IN	108	102	4	100,56	89,44	1,110	433
EC100.150IN	108	152	4,4	121,64	139,24	1,387	441
EC100.200IN	108	202	4,4	152,05	191,04	1,687	462
EC100.300IN	108	302	4,4/4,7	182,46	292,68	2,165	504

EC100.400IN	108	402	4,7	242,89	395,88	2,789	546
EC100.450IN	108	452	4,7	242,89	447,49	2.859	567
EC100.500IN	108	502	4,7	277,59	499,08	3,207	588
EC100.600IN	108	602	4,7	312,29	602,28	3,625	630

H (mm): External height

W (mm): External width.

Wire Ø (mm): Diameter of wires

SM (mm²): Cross-sectional area of metal = [n x long. wires] x [π x (Ø/2)²]

SU (cm²): Cross Section = [(H - wire Ø) x (W - wires Ø)] / 100

SWL: Safe Working Load according to test method IEC 61537. Span 1,5 m. **[*]** See chapter 2.

Materials:

Steel C9D UNE-EN ISO 16120-2

- Tensile Strength: 70 Kg/ mm²
- Yield Strength: 67 Kg/ mm²

Stainless Steel AISI 304 and 316L





- Tensile Strength: 79,3 Kg/ mm²
- Yield Strength: 71,3 Kg/ mm²

EASY installation: No fittings or accessories needed to assemble tray sections.

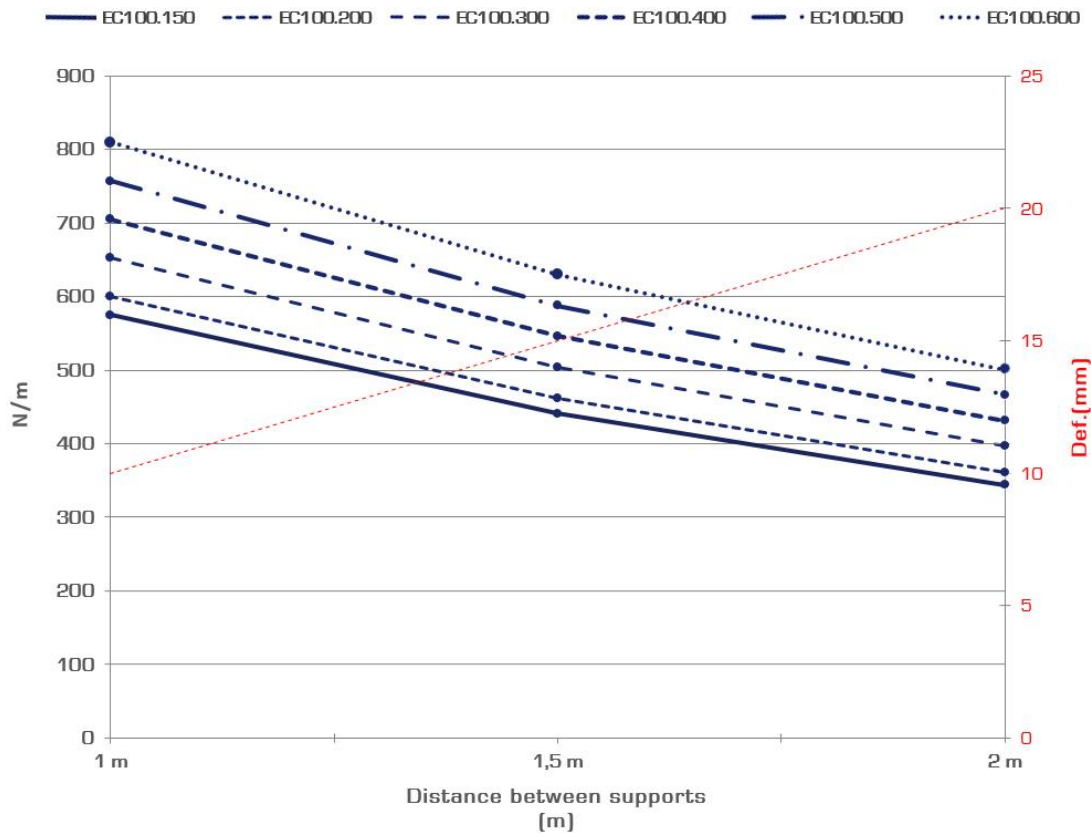
SAFE manipulation: Rounded wire ends.

Length of section: 3.000 mm

Packaging: Pallets are plastic wrapped, sides are protected with cardboard sheets marked VALDINOX and strapped.

<i>Symbol</i>	<i>Type of Coating</i>
	<p>EZ: ELECTROLYTIC ZINC PLATING</p> <p>Post coating: Passivation with trivalent chromium salts (Cr³⁺) Corrotriblue Extreme by ATOTECH</p> <p>According to standards:</p> <ul style="list-style-type: none"> - ISO 2081 - EN 112050 and ISO 4520. - European directives 2011/65/EU (RoHS) and subsequent modifications. <p>Zinc coating thickness: Minimum 12µm. Average 14µm</p> <p>Classified 2 in accordance with IEC 61537</p> <p>Note: The ISO 9227 salt spray test does not apply. The resistance is measured according to the thickness of the coating.</p>
	<p>HDG: HOT DIP GALVANIZED (DISCONTINUOUS HOT DIP GALV.)</p> <p>Anticorrosive coating obtained by dipping in cast zinc at 450 °, profiling and chrome plating for polishing</p> <p>According to standards:</p> <ul style="list-style-type: none"> - ISO 1461 and EN 1179. - European directives 2011/65/EU (RoHS) and subsequent modifications <p>Zinc coating thickness: Minimum 85 µm - Average 150 µm</p> <p>Classified 8 according to standard IEC 61537.</p> <p>Note: The ISO 9227 salt spray test does not apply. The resistance is measured according to the thickness of the coating.</p>
 	<p>IN: AISI 304 and 316L STAINLESS STEEL</p> <p>Austenitic stainless steel, chromium, nickel and molybdenum alloy. Type L-ACX 240 Low carbon content.</p> <p>Post-treatment Passivation - chemical removal of particles and contaminants giving the highest protection against corrosion.</p> <p>Classified 9D according to standard IEC 61537</p>

2. Safe Working Load Capacity (SWL)



Load uniformly distributed along the tray.

- First support (L) = 1,5m
- Distance between supports = 1,5m
- Distance between tray connection and support = 500mm
- Longitudinal Deflection (1% of L) = 0,015 m

[*] The SWL (Safe Working Load) detailed on this document are certified by the IECEE CB Scheme Certificate n° CBES1947-M1.

The working loads are the result of performing the tests without using any accessory (i.e. covers) that detract deflection and as a result will throw higher work loads.

3. Classification according to IEC 61537

Material: **Metallic**

Resistance to Flame propagation: **Non-Flame propagation**

Electrical Continuity: **With electrical continuity**

Electrical conductivity: **With electrical conductivity characteristics**

Resistance Against Corrosion: **EZ - Class 2 / HDG - Class 8 / IN - Class 9D**

Minimum Temperature: **-50°C** / Maximum Temperature: **+150°C**

Perforation in the base Area: **Class D >30%**

Impact Resistance: **up to 20J**

4. Test Results

IEC 61537 Electrical Continuity	Result
Measured between 2 points placed at 500 mm on one tray section. Limit allowed: < 5 mΩ/m	4,49 mΩ/m
Measured between 2 points placed at 50mm distance of the joint point of 2 tray sections Limit allowed: < 50 mΩ	4,91 mΩ
IEC 61537 Safe Working Load	Result
According to IEC 61537-test method. Distance between supports 1,5 m.	See Chapter 1
DIN 4102-12 Fire Resistance	Result
90 minutes at 1.000°C.	E90
IEC 61914 Shortcut Circuit	Result
Test performed on normal ambient conditions. Installation of trays following IEC 61537 standard for SWL Type 2 tests. Peak Current [kA]	104,96 kA

5. Safety recommendations.

- Wire mesh cable trays are designed and built according to the international standard IEC 61537 and can only be used to guide and support cables.
- A cable installation might collapse if the total weight of cables supported on a cable tray exceeds its certified maximum load capacity.
- Transport and handling of cable trays with your hands may cause cutting injuries. Adequate protective gear i.e. Long sleeves and protective gloves shall be worn. Installers should always be familiar with the health & safety regulations and if any such additional limitations may apply.
- Cable trays are designed for use as supports for cables and they are not intended to be used as ladders, walk ways or support for people as this can cause personal injury and also damage the system and any installed cables.
- The certified load capacity does not take into account, in any case, additional mechanical efforts caused by wind, snow, etc.

6. Quality

6.1. Quality Marks

Quality of EASYCONNECT wire mesh cable trays is certified by the following certification bodies and international institutions:

- **UL** - Certificate nº 20170523-E35049 according to NFPA 70 National Electrical Code and NEMA VE1 Metal Cable Tray System



- **IECEE** - CB Scheme Certificate nº ES1947-A1 according to IEC 61537:2006



6.2. EU Directives

VALDINOX complies with the following directives:

- **Directive 2014/35/UE LVD (Low voltage Directive)**
- **Directive 2014/30/UE EMC (Electromagnetic compatibility)**

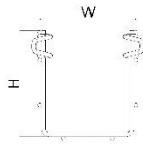
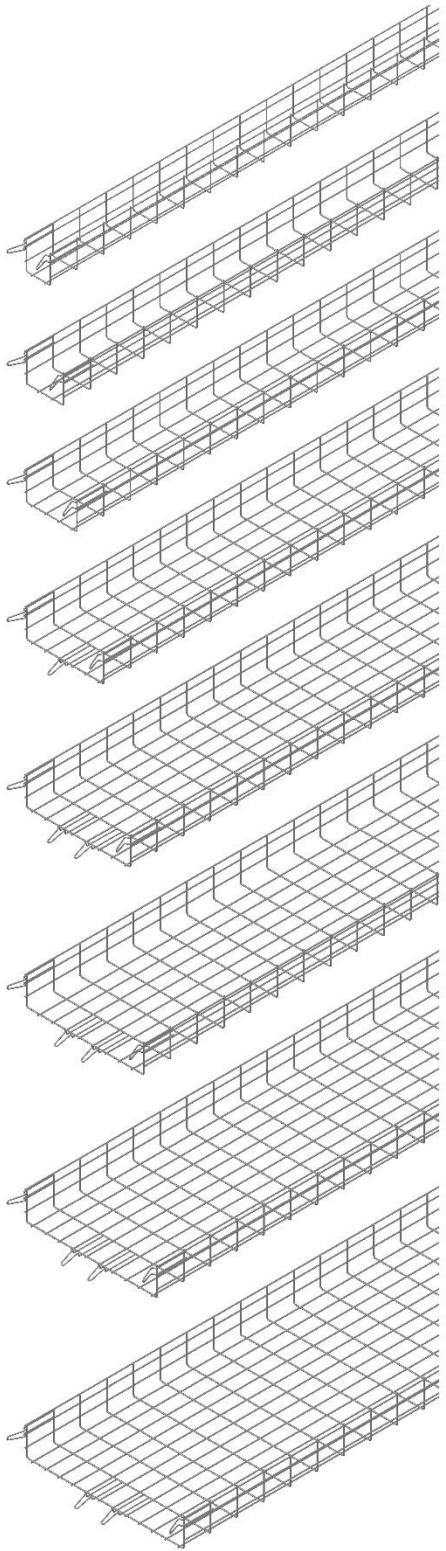
The cable trays are passive products, in normal use with respect to electromagnetic influences the emission and immunity.

Cable management systems, are by definition a passive element, are not affected by this directive. However, properly connected to the ground network, the metal cable carrier system contributes positively to the EMC correct installation.

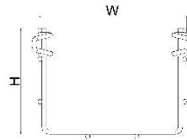
VALDINOX recommends grounding clamps shall be placed each 12 metres or 4 tray sections.

- **Directive 2011/65/UE RoHS.** Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment.
- **Directive 2012/19/UE WEEE.** Directive on waste electrical and electronic equipment.

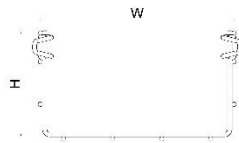
7. Drawings



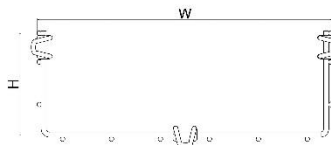
EC100.100



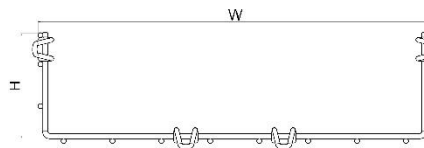
EC100.150



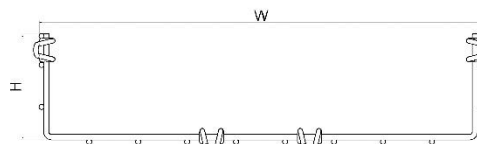
EC100.200



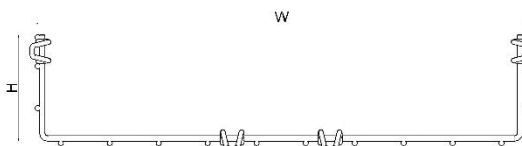
EC100.300



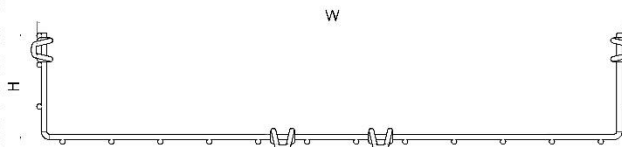
EC100.400



EC100.450



EC100.500



EC100.600



Declaration of Conformity

Cable Support Systems

The Low Voltage Directive (LVD) [2014/35/EU] ensures that electrical equipment within certain voltage limits provides a high level of protection for European citizens, and benefits fully from the Single Market. It has been applicable since 20 April 2016

We declare that all our products, including EASYCONNECT wire mesh cable trays, supports and accessories, are suitable and safe for the intended use and are designed and manufactured in conformity with the LVD and the following standards and regulations:

- UNE EN IEC 61537. Cable management - Cable tray systems and cable ladder systems.
- RoHS 2011/65/UE Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment.
- WEEE 2012/19/UE Directive on waste electrical and electronic equipment.
- EN ISO 9001

VALDINOX S.L.

Santander, February 2018

Carmen Valdés
Managing Director