

Technical specification



68 Fiberoptic raceways in U48X halogen free

Description

Use

- Fiber routing system to support, protect and routing of fiber optic cords for indoor installations: U48X

Design

- Absence of sharp edges or pressure points which can damage or reduce the fiber optic cord performance.
- Minimum bend radius for all system fittings: 1" (25,4 mm.)
- Length: 7 ft. (2,134 m)
- Colour: RAL 1023 Yellow

Advantages

- The fiber optic raceway system is made of high quality insulating material and does not require grounding and does not transmit eddy current, stray current or surge currents.
- CE marking acc. EN 61537. IEC 61537 compliant. Loads and supports tested according the same international standard of LV cable trays.
- Good fire performance. Halogen free thermoplastic compound U48X own formulated.
- Ozone Resistant. (Most part of plastics cracks due to the Ozone produced by electrical and electronic contacts in PCB and panels).
- One week delivery thanks to a complete stock of all the parts.

Easy-to-install

- Safe, easy and quick mounting. No burrs when cutting.
- A wide range of fittings that make cutting or drilling unnecessary during installation, except cutting to fit lengths.
- Fast and tool-less junction system. All fittings include junction.
- Support system include fast and tool-less fixings.

Mounting instructions

- To fulfil the characteristics defined herein, the installation must be carried out in accordance with the manufacturer`s assembly instructions provided in the main product packaging and also available on the website www.unex.net. ⁽¹⁾

Product composition

- Halogen contents: acc. EN 50642: 2018: Halogen free
- Silicone contents: Without silicone (<0,01%).
- RoHS Directive compliance: Compliant .

Characteristics

BS EN 61537:2007 (IEC 61537:2006) International Cable tray and Cable Ladder standard

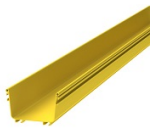
Min./max. transport, storage, installation and application temperature	-5 °C up to +40 °C.
Impact resistance	10 J at -5 °C



Our quality management system complies with the requirements of UNE-EN ISO ISO 9001:2015 for the design, production and commercialization of Unex Systems.

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Electrical characteristics	<ul style="list-style-type: none"> • Non-metallic fiber routing system: (except supports : metallic) • Without electrical continuity. • Non-conductive. (except supports : conductive)
Resistance to flame propagation acc./ EN 60695-11-2:2003 ⁽³⁾	Non flame propagating system.
Coating	Without coating. Except Supports (Steel with organic coating)
% Perforation of the base area of cable routing system	Non perforated fiber routing system. Class A (between 0% and 2%)
Available dimensions and Safe Working Load (SWL) acc. Test Type I ⁽⁴⁾	<ul style="list-style-type: none"> • 4"x4" (101,6x101,6 mm.) : 7,23 Kg/m • 4"x6" (101,6x152,4 mm.) : 10,84 Kg/m • 4"x12" (101,6x304,8 mm.) : 21,68 Kg/m
Safe Working Load (SWL) Test conditions ⁽⁵⁾	<ul style="list-style-type: none"> • T = +40 °C • Longitudinal deflection lower than 1%. • Transverse deflection lower than 5%. • Test Type I : the junction between two lengths of fiber routing system is placed in the midpoint of the span (the worst situation for testing) so that in a real situation the junction can be placed at any point between two supports. • The fiber routing system must be able to support 1,7 times the safe working load (SWL) without collapse.
Glow-wire test acc./ IEC 60695-2-11:2001 ⁽³⁾	Severity degree 960°C.
Performance against corrosion (humid and saline)	Inherently resistant to corrosion and therefore do not require testing.

Constructive and Functional characteristics

- Profile type: Lengths, made with solid walls and manufactured by extrusion.
- Supports: Supports must comply with EN 61537:2007 and shall resist at least the maximum rated loads of the carried fiber routing systems.
- Packaging: The product must be properly packed and clearly identified.

Compulsory regulations

CONFORMITY WITH THE DEMANDS OF EUROPEAN DIRECTIVE 2014/35/EU

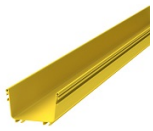
CE Marking ⁽³⁾	Fiberoptic raceways 68. Conformity with standard EN 61537:2007.
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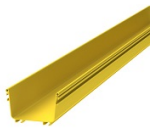


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Characteristics of U48X raw material

- Base raw material: halogen free thermoplastic with recycled content
 - Halogen contents according to EN 50642: 2018: Halogen free
 - Silicone contents: <0,01% ⁽⁶⁾
 - Phthalate contents according to ASTM D2124-99:2004: <0,01% ⁽⁶⁾
 - Dielectric strength according to IEC 60243-1:2013: 18±5 kV/mm
Test sample thickness 2,0 mm.
 - Reaction to fire according to NF F 16-101:1998: Class F2
 - UL flammability tests on plastic materials according to ANSI/UL 94: 1990: Degree UL94: V0
Test sample thickness 3,2 mm
 - L.O.I. Oxygen index according to EN ISO 4589:1999: (Concentration %) =32±3
Test sample thickness 3,2 mm
 - Coefficient of linear expansion: 0,07 mm/°C m. ⁽⁷⁾
 - Behaviour to chemicals exposure: It is resistant to the majority of:
 - Oils (mineral, vegetable and paraffins)
 - Diluted acids
 - Fatty acids
 - Alcohols
 - Carbonates, Phosphates, Nitrates, Sulphates and other saline solutions
 - Aliphatic hydrocarbons
 - Diluted hydroxides
- However, it is not resistant to the majority of:
- Amines
 - Ketones
 - Phenols
 - Aromatic hydrocarbons ⁽⁷⁾





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Notes

1. If additional instructions in the form of detailed drawings have been supplied, they must be respected and take precedence over the general assembly instructions.
2. Except for new part numbers, which are under process of obtaining quality marks and approvals. See updated information of each part number on www.unex.net
3. Tested according to standard prescriptions of EN 61537:2007 . Equivalent to IEC 61537:2006 Cable tray and cable ladder standard.
4. Not yet defined or tested. It will be 100% filling with fiber optic cords.
5. Representative distances of multiple spans of complete straight sections of fiber routing system installed with junctions. If accessories are inserted, Unex recommends shorter distances. In general, each straight section portion must have at least a support underneath. Large fittings for 12" fiber routing system such as T branches, flat bends and cross require support underneath. When supports come from racks, Unex recommend attaching at least one support on top to each rack.
6. Detection limit for the analytical technique applied.
7. All features marked are based on random tests of the material in the manufacture of our products. However, they only reflect the values accepted by the raw material manufacturers, which are provided only as information and guidance.

* All information contained herein is completely objective and is the result of a wide experience in satisfying our costumers' requirements . For more details, please visit our website.

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