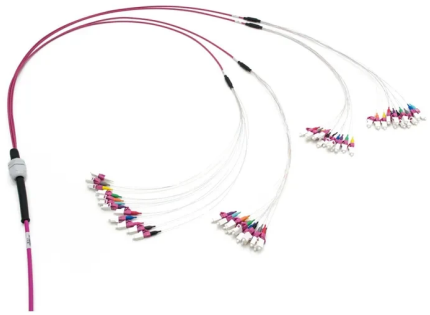
LANmark-OF ENSPACE LC/LC Pre-Term Euroclass Cca

LANMARK-OF ENSPACE PRE-TERM OM4 X48F LC(900MM)-LC(900MM) FAN OUT E XXXM LSZH CCA VIOLET

Aginode Ref: N157.D048LLExxx-VC

- Factory terminated LC fibre assembly
- ENSPACE Pre-Term for installation in LANmark-OF ENSPACE Patch Panel
- Fibre count: 48F
- Fibre type: OM4
- Small cable diameter reduces required data centre space
- Reaction to fire: Cca according to EN50575:2014 +A1:2016

The assembly consists of a Micro-Bundle Universal Cca cable terminated with LC connectors on each side in a factory.



STANDARDS

ISO/IEC 11801

Pre-Term for data centres, buildings and campus based on Micro-Bundle Universal

The cable has a small diameter and bend raduis to meet data centre requirements.

The cable is watertight and rodent retardant due to the glass yarns. It can be used in buldings and between buildings.

Fire performance

The cables have been tested for fire performance according to the new Construction Product Regulation: EN50575:2014 +A1:2016.

According to this standard the cables have a very high fire performance with minimal fire load and spread, smoke density, droplets and acidity: Cca.

The Declaration Of Performance for these cables can be found under fibre cables and the corresponding cable for fibre count and fibre type in the section “Micro-Bundle Universal Cca”.

In addition the cables meet the requirements for flame non-propagation (IEC 60332-1) and fire non-propagation (IEC 60332-3).

Pre-Term characteristics

The Pre-Term has a dual stage fan-out design.

The first fan-out point is between the cable and the legs of the fan-out. Each leg of the fan-out contains 1 Micro-Bundle with 12 fibres inside. This fan-out has been reinforced with aramid yarns.

The second fan-out distributes the reinforced Micro-Bundle into 12 buffered fibres. The second fan-out is optimized for installation and fixation into the ENSPACE adaptor modules.

The Tight Buffered fibres of the Pre-Term are easy to arrange inside a ENSPACE module since they are at the same time flexible and robust enough to handle.

The connectors on the Tight Buffered fibres have coloured boots for identification in compliance with the TIA/EIA standard. In manufacturing a fibre pair flip has been implemented. When installing the connectors inside the ENSPACE modules the coloured boots need to match the colours of the integrated strip inside the ENSPACE module to obtain transmit-receive polarity in the channel.

The fan-out is protected with a bubble foam for protection during transport and installation. Every bundle of 12 connectors has an additional individual protection to avoid mixing them up with other connectors.

A pulling eye system is positioned at one side of the Pre-Term to facilitate the installation. This pulling eye is connected to the internal strength element of the cable. The maximum pulling force on the pulling eye is 450N.

The LC/LC Pre-Terms come with a PG-13 cable gland that fits into the LANmark-OF ENSPACE patch panel slots.

In order to reduce overlengths in data centers the Pre-Terms are custom made and available with 1m increments. The "xxx" in the N-number is the length in metre between the cable glands, i.e. the Pre-Term length between the rear of the patch panels.

The typical value for the insertion loss for the low loss LC/LC connection is 0,15 dB. The limit value is 0,25 dB measured according to standard IEC61300-3-4. The minimum return loss is measured according to standard IEC 61300-3-6. For a mutimode LC connection the RL is 30 dB, for a singlemode LC connection it is 45 dB and for a LC/APC connection it is 55 dB.

All LANmark-OF Pre-term assemblies are fully terminated and tested in a quality assured factory environment.

LANmark-OF ENSPACE Pre-Term OM4 x48F LC(900µm)-LC(900µm) fan out E xxxm LSZH Cca Violet

Characteristics

Construction characteristics	
Fiber optic type	OM4 50/125
Dimensional characteristics	
Number of optical fibres	48
Nominal outer diameter (mm)	5.9 mm
Approximate net weight	35 kg/km
Mechanical characteristics	
Mechanical resistance to impacts	10 impacts of 1 N.m
Crush resistance (IEC 60794-1-E3)	100 N/cm
Transmission characteristics	
Insertion Loss, maximum, dB	0.25 dB
Return Loss, Minimum, dB	30 dB
Usage characteristics	
Operating temperature, range	-10...60 °C
Fire retardant	IEC 60332-3
Minimum dynamic operating bending radius	120.0 mm
Minimum static operating bending radius	90 mm
Flame retardant	IEC 60332-1
Storage temperature, range	-20...60 °C
Mechanical durability/matings	1000
Ambient installation temperature, range	0...40 °C