

# LANmark-OF ENSPACE Method C MTP-MTP Pre-Term OFNP APAC

LANMARK-OF ENSPACE METHOD C PRE-TERM SM X12F MTP/M APC-MTP/M APC XXXM OFNP YELLOW

**Aginode Ref:** N144.P12MMExxxY-M

- Factory terminated MTP-MTP fibre assembly
- Flexible fan-out for ease of installation in patch panel
- Small cable diameter reduces required data centre space
- Method C polarity Pre-Term
- Only one type of patch cords and one type of cassettes required for duplex transmission
- Fibre count: 12F
- Fibre type: singlemode (OS2)

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

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

### Fire performance

The cables have been tested for fire performance according to UL Plenum rated.

According to this standard the cables have a very high fire performance with minimal fire load and can be used in air flow space.

### MTP\*-MTP Pre-Term characteristics

The MTP-MTP Pre-Term has standard pinned (male) connectors. This matches with the un-pinned (female) connectors in the ENSPACE modules and the female Plug&Play modules.

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 back side of the patch panels.

After the cable gland the Pre-Term has a fan-out. The fan-out splits the cable into tubes. The tubes are reinforced with aramid yarns. At the end of each tube a MTP-connectors is mounted. The jacket of the tube is the same colour as the cable jacket. Close to the MTP-connector a label is installed to



## STANDARDS

ISO/IEC 11801

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identify the number of the leg.

The Pre-Terms are optimized for both pulling and laying in data centers. On both sides the MTP connectors are protected by a bubble foam. The maximum pulling force on the pulling eye is 450N. The detachable pulling eye with corrugated tube can be ordered using PN N890.100HP.

The MTP-MTP Pre-Terms come with a PG-13 cable gland that fits into the LANmark-OF ENSPACE and Plug&Play patch panel slots.

### **Optical Performance and Polarity**

The insertion loss for a multimode the MTP-MTP\* connection has Low Loss performance: typical insertion loss is 0,15 dB with a maximum of 0,35 dB insertion loss. Ultra Low loss is also available with typical insertion loss 0.125dB with a maximum of 0.25dB insertion loss.

The insertion loss for a singlemode the MTP-MTP\* connection has Low Loss performance: typical insertion loss is 0,5 dB with a maximum of 0,75 dB insertion loss. Ultra low loss is also available with typical insertion loss 0.15dB with a maximum of 0.35dB insertion loss.

The insertion loss of a MTP-MTP\* connection is measured according to standard IEC61300-3-45.

The minimum return loss for a multimode MTP connection is 20 dB measured according to IEC 61300-3-6. The minimum return loss for a singlemode MTP connection is 45 dB measured according to IEC 61300-3-6.

The method C Pre-Term has a pairflip key up / key down design. This is in agreement with standard TIA-568.3-D-2016 method C.

For a duplex transmission like for 10GBase-SR (10G) polarity in the channel is maintained with this method C design and the use of the same straight cassettes on both sides. In addition the same patch cords can be used on both sides.

For parallel optics like for 40GBase-SR4 (40G) these method C Pre-Terms can be used with key up/key down adaptors on one side of the channel and key up/key up adaptors on the other side. The same straight female-female patch cords can be used on both sides.

# LANmark-OF ENSPACE Method C Pre-Term SM x12F MTP/M APC-MTP/M APC xxxm OFNP Yellow

## Characteristics

### Construction characteristics

Fiber optic type	SM (G657.A1)
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### Dimensional characteristics

Number of optical fibres	12
Nominal outer diameter (mm)	4.5 mm

### Mechanical characteristics

Mechanical resistance to impacts	10 impacts of 3 N.m
Crush resistance (IEC 60794-1-E3)	100 N/cm
Maximum installation tension	450 N

### Transmission characteristics

Insertion Loss, maximum, dB	0.75 dB
Return Loss, Minimum, dB	45 dB

### Usage characteristics

Operating temperature, range	-20...60 °C
Minimum dynamic operating bending radius	20 (xD)
Minimum bending radius, static (XD)	10