tML® Xtended - FO Module 5HP 2x MPO/MTP® without Pins/12x LC Duplex w. shutter 50/125µ OM5

\*\*tML® Xtended

tML® Xtended is a patented, modular cabling system consisting of the three key components module, trunk cable and rack mount enclosure. The system components are 100 percent manufactured, pre-assembled and tested in Germany. They enable plug-and-play installation on site – especially in data centres, but also in industrial environments – within the shortest possible time. Heart of the system are the rear MPO/MTP® 12 fiber and Telco connectors, which can be used to connect at least six or twelve ports at a time. Depending on the module configuration, transfer rates of up to 200G are currently possible with SR4. The fibre optic and TP modules can be used together in a module carrier with a very high port density. The tde offers its tML® cabling system as a proven tML® standard system and in the highly innovative variants tML® 24 system and now tML® 32 system for extreme scalability and very easy migration to higher transmission rates such as 40G, 100G, 200G and 400G.

\*\*tML® - tde Modular Link

tML® is a patented, modular cabling system consisting of the three key components module, trunk cable and rack mount enclosure. The system components are 100 percent manufactured, pre-assembled and tested in Germany. They enable plug-and-play installation on site – especially in data centres, but also in industrial environments – within the shortest possible time. Heart of the system are the rear MPO/MTP® and Telco connectors, which can be used to connect at least six or twelve ports at a time. Depending on the module configuration, transfer rates of up to 200G are currently possible with SR4. The fibre optic and TP modules can be used together in a module carrier with a very high port density. The tde offers its tML® cabling system as a proven tML® standard system and in the highly innovative variants tML® Xtended, tML® 24 System and now tML® 32 System for extreme scalability and very easy migration to higher transmission rates such as 40G, 100G, 200G and 400G.

\*\*tML® Xtended - FO Modules MPO/MTP® 5HP

The utility patent protected tML® Xtended - module will be installed in the link on one side rotated 180 degrees. The associated tML® Xtended trunk cable has a type B pin out. The complete link corresponds to EIA / TIA "Method B". The advantage is that before and after migration uniformly configured patch cables and modules are used.
The tML® Xtended - FO Module MPO/MTP®is intended for the installation in the tML® Rack Mount Enclosure 3U (for 17 x Modules).
A special cleaning tool is required to clean the adapters with shutter.

\*\*TECHNISCHE\_DATEN

The end faces of the connectors are optimized by means of Lasercleaving and machine polish. The MPO/MTP®plug has a defined fiber height of 1 - 3.5µ. The max. adjacent fiber height difference is 0.2µm and for all fibers 0.3µm. All system components (modules, trunk cables and patch cords) are co-ordinated for the reaching of the performance particularly. The module is marked with sequential serial number and article number. The modules are ROHS compliant.

|  |  |
| --- | --- |
| Entry | 2 x MPO/MTP®Female Adapter (limegreen) back |
| Exit | 6 x LC Quad Adapter (limegreen) front |
| Tests | Interferometer, Insertion Loss, Return Loss and Visual Final Inspection; all measured values are electronically archived |
|  | QS-Managementsystem ISO 9001, ISO 14001 and TL 9000 |

|  |  |
| --- | --- |
| Box | Galvanized steel sheet |
| Front Panel | Stainless steel |

\*\*\*FO Adapters

|  |  |
| --- | --- |
| Type | MPO/MTP® |
| Application | Multimode OM5 |
| Design | without Flange |
| Connector style | SC Simplex |
| Key Orientation | Type A, Key up/down |
| Color | Limegreen |
| Material | Plastic |
| Sleeve | -- |
| Shutter | -- |
| Standards | IEC 61754-7 TIA 604-5 |
| Manufacturer | US Conec |

\*\*\*FO Adapters

When the connector is inserted into the adapter it compress the springs, opening the internal shutter. The internal shutter opens, and due to the special design of the shutter, it will not touch the ferrule end face. As the connector is removed from the adapter, the shutter spring automatically returns the internal shutter to the closed position.

|  |  |
| --- | --- |
| Type | LC Duplex |
| Application | Multimode OM5 |
| Design | One-Piece without flange |
| Connector style | SC simplex |
| Color | Limegreen |
| Housing material | Plastic |
| Sleeve | Zirkonia Staight Split |
| Self-closing shutter material | Metal |
| Self-closing shutter protection | Dust an laser light |
| Manufacturer | tde |

\*\*\*FO Connectors

The end faces of the connectors are optimized by means of Lasercleaving and machine polish. The MPO/MTP® plug has a defined fiber height of 1 - 3.5µ. The max. adjacent fiber height difference is 0.2µm and for all fibers 0.3µm.

|  |  |
| --- | --- |
| Type | MPO/MTP® Female Push Pull Locking |
| Ferrule | 12 Fiber MM Elite® ferrule, PPS |
| Boot colour | Black |
| Manufacturer | tde/US Conec |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Fiber | Type | Wavelength | Insertion loss typ. | Insertion loss max. | Return loss min. |
| 50/125µ OM5 | MPO/MTP® | 850 nm | ≤ 0.11 dB | 0.25 dB | 35 dB |

\*\*\*FO Connectors

|  |  |
| --- | --- |
| Connector Type | LC Unibody Simplex |
| Housing | Plastic, Limegreen |
| Ferrule | Zirkonia Staight Split, Spring-loaded Axially |
| Ferrule Hole | 126 µ |
| Mating Cycles | 1.000 |
| Operating Temperature | -40°C up to +75°C |
| Strain Relief to | 100 N |
| Manufacturer | tde |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Fiber | Type | Wavelength | Insertion loss typ. | Insertion loss max. | Return loss min. |
| 50/125µ OM5 | LC | 850 nm | ≤ 0.10 dB | 0.30 dB | 35 dB |