

tML[®] - TP Trunk Cable both ends preterminated 6x termination block Cat.6_A UC Future 24x2xAWG26

LSHF



tML[®] 24

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 400G 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[®] 12, tML[®] 24, tML[®] 32 and now tML[®] 24+ System for extreme scalability and very easy migration to higher transmission rates such as 40G, 100G, 200G, 400G and 800G and more.



tde[®] trans data elektronik GmbH

Headquarter address:

Lingener Str. 2
D-49626 Bippen/Ohrte
Tel.: +49 5435 9511 0
Fax.: +49 5435 9511 32

Sales office address:

Prinz-Friedrich-Karl-Str. 46
D-44135 Dortmund
Tel.: +49 231 8805 61 13
Fax.: +49 231 8805 61 15

info@tde.de | www.tde.de

tML[®] - TP Trunk Cable both ends preterminated 6x termination block Cat.6_A UC Future 24x2xAWG26

LSHF

Technical Data

| | |
|------|--------------|
| xxxx | Length in cm |
|------|--------------|

TP Termination Block

| | |
|--------------------------------|--|
| Construction | plastic with insulation displacement connection |
| Gold plating termination block | 30 μ" |
| Color | transparent white |
| Application | Flex cable AWG 26 - AWG 27, alternative AWG 26 Solid Wire |
| | Plug bears small flag-like installation guide with color codes for pin-out according to EIA/TIA 568 A and B. |

TP Cable

Construction

| | |
|----------------|--|
| Type | UC FUTURE COMPACT AWG26/1 Cat.7 S/FTP 24P |
| Conductor | Bare copper wire, diameter 0.4 mm (AWG26) |
| Insulation | Foam-skin PP, diameter 1.0 mm |
| Twisting | 2 insulated wires to the pair |
| Pair screening | Pet-Al foil around each pair |
| Stranding | 6 (5+1) bundles with 4 foiled pairs blue, orange, green, brown |
| | Coloured tapes are around each bundle |
| Screen | Tinned copper braid 85% coverage |
| Sheath | LSHF-FR, diameter 13.9 mm |

Application

IEEE 802.3: 10Base-T; 100Base-T; 10GBase-T, ISDN; xDSL

IEEE 802.5 16 MB; ISDN; TPDDI; ATM155Mbit/s

The conductor diameter is smaller compared to the standard installation cables. This leads to an increased attenuation and therefore the

operating distance is reduced (60m instead of 90m installation cable in standard permanent link).

Standards

IEC 61156-6 work area cable

ISO/IEC 11801 2nd ed.

EN 50173-5

EN 50288-4-2

Flame resistance

PVC IEC 60332-1

LSHF-FR IEC 60332-3-24; IEC 60754-2; IEC 61034 ; EN 50399 Class D_{ca}

tML[®] - TP Trunk Cable both ends preterminated 6x termination block Cat.6_A UC Future 24x2xAWG26

LSHF

Mechanical properties

| | | |
|------------------------|---------------------|-------------------|
| Minimum bending radius | Without load | ≥ 55 mm |
| | With load | ≥ 110 mm |
| Temperature range | During operation | -20°C up to +60°C |
| | During installation | 10°C up to +40°C |

Electrical properties at 20°C

| | | |
|---------------------------------|-------------|----------------------------|
| Loop resistance | | ≤ 280 Ω/km |
| Resistance unbalance | | ≤ 2% |
| Test voltage | core/core | 1000 V _{DC} 1 min |
| | core/screen | 1000 V _{DC} 1 min |
| Capacitance | 800 Hz | Nom. 44 nF/km |
| Capacitance unbalance | | ≤ 1600 pF/km |
| Impedance | 100 MHz | 100 Ω ± 5 Ω |
| Nominal velocity of propagation | | ca. 76% |
| Insulation resistance | 500 V | ≥ 2000 MΩkm |
| Transfer impedance | at 1 MHz | ≤ 5 mΩ /m |
| | at 10 MHz | ≤ 5 mΩ /m |
| | at 30 MHz | ≤ 10 mΩ /m |

Electrical Data (nominal) acc. to Cat.7 (at 20°C)

| F | Attenuation | NEXT | PS-NEXT | ELFEXT | PS-ELFEXT | Return loss |
|-------|-------------|------|---------|---------|-----------|-------------|
| MHZ | dB/10m | dB | dB | dB/100m | dB/100m | dB |
| 1.0 | 0.3 | 90 | 87 | 80 | 77 | 23 |
| 4.0 | 0.6 | 90 | 87 | 80 | 77 | 24 |
| 10.0 | 1.0 | 90 | 87 | 80 | 77 | 25 |
| 16.0 | 1.3 | 90 | 87 | 76 | 73 | 25 |
| 20.0 | 1.4 | 90 | 87 | 74 | 71 | 25 |
| 31.2 | 1.8 | 90 | 87 | 70 | 67 | 25 |
| 62.5 | 2.6 | 90 | 87 | 64 | 61 | 23 |
| 100.0 | 3.2 | 87 | 84 | 60 | 57 | 21 |
| 125.0 | 3.6 | 85 | 82 | 58 | 55 | 20 |
| 155.5 | 4.0 | 84 | 81 | 56 | 53 | 19 |
| 175.0 | 4.3 | 83 | 80 | 55 | 52 | 19 |
| 200.0 | 4.6 | 82 | 79 | 54 | 51 | 18 |
| 250.0 | 5.1 | 81 | 78 | 52 | 49 | 18 |
| 300.0 | 5.6 | 80 | 77 | 50 | 47 | 17 |
| 450.0 | 6.9 | 77 | 74 | 47 | 44 | 17 |
| 600.0 | 7.9 | 75 | 72 | 44 | 41 | 17 |

tML[®] - TP Trunk Cable both ends preterminated 6x termination block Cat.6_A UC Future 24x2xAWG26
LSHF

Technical Data

| | |
|------------------|-----------------------------|
| Designation | J-02YS(ST)CH |
| Type | 24x2x0.4PiMF |
| Outer diameter | 13.9 mm |
| Fire load | 2.171 MJ/km |
| Fire load | 0.603 kWh/m |
| Reaction to Fire | D _{ca} -s2, d2, a1 |
| Weight | 230 kg/km |
| Copper content | 115 kg/km |
| Tensile force | 500 N |

Product variants & accessories

| Art.-No. | Description |
|----------------------|---|
| TML-RJ45DCLX6 | tML [®] - RJ45 DC 6fold Module Cat.6 _A ISO/IEC with LID |
| TML-RJ45DCX6 | tML [®] - RJ45 DC 6fold Module Cat.6 _A ISO/IEC |
| TML-TKT/TKT-N26Cxxxx | tML [®] - TP Trunk Cable both ends preterminated 6x termination block Cat.6 _A UC Future 24x2xAWG26 LSHF |