FO-Patch cord MTRJ/ST AMP/tde 50/125µ OM2 Duplex MiniZip LSOH Length: xxxxx



tde - Fiber Optic Assemblies

The tde patch and trunk cables are manufactured completely at the German facility in Ohrte. Production processes at tde meet the latest standards, and the company has one of the most up-to-date fiber optic assembly houses in Europe. Fiber optic patch cables and trunk cables are manufactured in many different configurations using highly automated processes on two independent mass production lines. The range of products on offer encompasses the entire spectrum of connector types available on the market. Production capacity is around 100,000 fiber optic connectors per month, and this can be ramped up easily whenever required. To guarantee consistently top quality, only the best components from renowned vendors are used. All tde production staff have the necessary qualifications and education, and have been well trained in using specialist technical equipment such as laser cleavers and glue-dispensing robots.
Each cable application is subjected to a full test procedure comprising interferometer measurements, insertion loss and return loss measurements and a final visual inspection to ensure that only 100% error-free products are shipped to the customer.

Products made by tde perform at least internationally accepted quality standards and norms. The quality management system is ISO 9001, ISO 14001 and TL9000 certified.

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Technical Data

FO Connectors

Type	MTRJ w/o pins
Ferrule	MT-Ferrule
Ferrule Hole	126 µ
Connector colour	Black
Boot colour	Beige
Manufacturer	tde

Optical performance

Fiber	Type	Wavelength	Insertion loss typ.	Insertion loss max.	Return loss min.
50/125µ OM2	MTRJ	850 nm	≤ 0.35 dB	0.45 dB	20 dB
62.5/125µ OM1	MTRJ	850 nm	≤ 0.35 dB	0.45 dB	

FO Connectors

Connector Type	ST
Housing	Metal
Ferrule	Zirconia Straight Split
Ferrule Hole	126 µ
Mating Cycles	1.000
Operating Temperature	-40°C up to +75°C
Strain Relief to	150 N
Manufacturer	tde

Optical performance

Fiber	Type	Wavelength	Insertion loss typ.	Insertion loss max.	Return loss min.
50/125µ OM2	ST	850 nm	≤ 0.25 dB	0.45 dB	30 dB
62.5/125µ OM1	ST	850 nm	≤ 0.25 dB	0.45 dB	30 dB

FO Cables

Cable Data

Type	IVH02G50 OM2
Fiber Amount	2
Fiber Type	MM-OM2, 50/125µ, Corning
Secondary Coating	600µ, easy strippable
Strength Members	Aramid yarns
Outer Jacket	LSOH (Halogen free, low smoke, flame retardant thermoplastic compound)
Jacket Colour	Orange

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Outer Diameter	2x 1.8 (± 0.1mm)
Standard printing	"t d e – IVH02G50-1.8 LSZH" and sequential meter marking + Lot number
Apllications	Patchcords/ Pigtails

Mechanical/ Thermal Characteristics

Weight	12 kg/km
Operational tensile load	210 N
Bending radius	15 x outer diamter
Operating temperature	-5°C to + 60°C
Fire resistance	Pass (EN 50266, IEC 60332-3)
Halogen content	Free (EN 50267, IEC 60754)
Smoke density	Low (EN 50268, IEC 61034-1/2)

Special features

Characteristics	Fiber and aramid yarn free movable in the compound

FO Fiber

Type	Corning 50/125µ OM2 multimode fiber
Manufacturer	Corning

Optical Specifications

Bandwidth	500 at 850 nm / 500 at 1300 nm
Attenuation	At 850 nm max. ≤ 2.5 dB/km At 1300 nm max. ≤ 0.8 dB/km
Numerical Aperture	0.200 ± 0.015

Dimensional Specifications

Core Diameter	50.0 ± 3.0 µm
Cladding Diameter	125.0 ± 2.0 µm
Core-Clad Concentricity	≤ 3.0 µm
Cladding Non-Circularity	< 2.0%
Core Non-Circularity	≤ 5.0%
Coating Diameter	245 ± 5 µm
Coating-Cladding Concentricity	< 12 µm

Environmental Specifications

Enviromental Test	Test Condition	Induced Attenuation 850 nm and 1300 nm (dB/km)

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Temperature Dependence	-60°C to +85°C	≤ 0.20
Temperature Humidity Cycling	-10°C to +85°C and 4% to 98% RH	≤ 0.20
Operating Temperature Range	-60°C to +85°C	

Mechanical Specifications

Proof Test	The entire fiber length is subjected to a tensile stress ≥ 100 kpsi (0.7 GN/m²).
Length	Fiber lengths available up to 8.8 km/spool.

Performance Characterizations

Refractive Index Difference	2%
Effective Group Index of Refraction	850 nm: 1.490 1300 nm: 1.486
Fatigue Resistance Parameter (nd)	20
Coating Strip Force	Dry: 0.6 lbs (2.7N) Wet: 14 days in 23°C water soak: 0.6 lbs (2.7N)
Cromatic Dispersion	Zero Dispersion Wavelength (λ0): 1300 nm ≤λ0 ≤ 1320 nm Zero Dispersion Slope (S0): ≤ 0.101 ps/(nm²*km)

Product variants & accessories

Art.-No.	Description
L-MT/ST09D-Mxxxxx	FO-Patch cord MTRJ/ST AMP/tde 9/125µ OS2 Duplex MiniZip LSOH Length: xxxxx
L-MT/ST50D3Mxxxxx	FO-Patch cord MTRJ/ST AMP/tde 50/125µ OM3 Duplex MiniZip LSOH Length: xxxxx
L-MT/ST50D-Mxxxxx	FO-Patch cord MTRJ/ST AMP/tde 50/125µ OM2 Duplex MiniZip LSOH Length: xxxxx
L-MT/ST62D-Mxxxxx	FO-Patch cord MTRJ/ST AMP/tde 62,5/125µ OM1 Duplex MiniZip LSOH Length: xxxxx

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