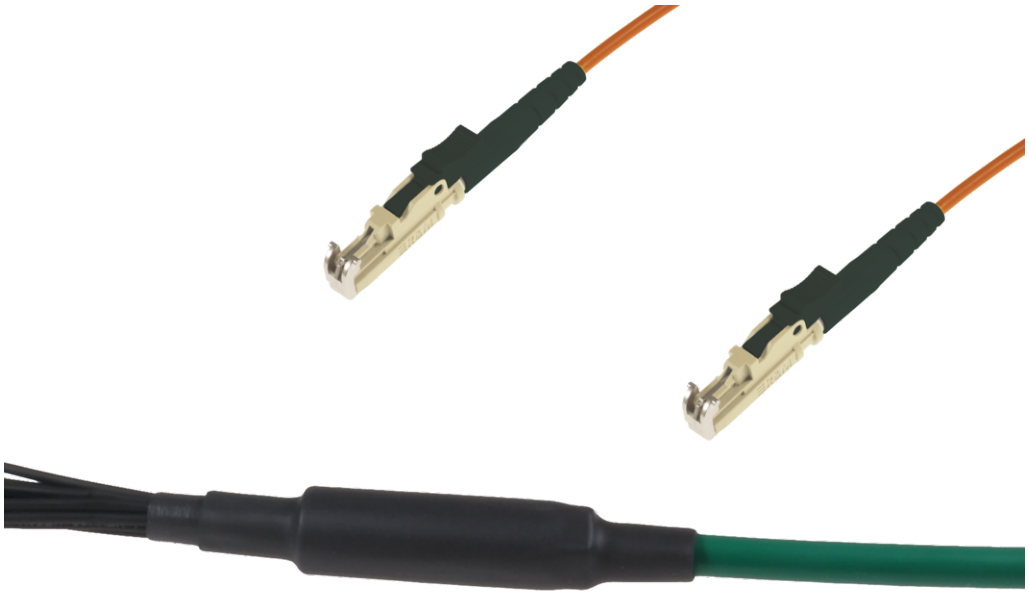
FO Universal Cable 96x E2000/96x E2000 96G50/125µ OM2 LSHF, Length: xxxx



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	E2000
Ferrule	Ceramic
Ferrule Hole	126 µ
Connector colour	Beige
Lever colour	Black
Boot colour	Black
Manufacturer	RDM

Optical performance

Fiber	Type	Wavelength	Insertion loss typ.	Insertion loss max.	Return loss min.
50/125µ OM2	E2000	850 nm	≤ 0.25 dB	0.45 dB	30 dB
62.5/125µ OM1	E2000	850 nm	≤ 0.25 dB	0.45 dB	

FO Fan-Out

Fan-out head	155 mm
Longest Fiber	1230 mm
Shortest fiber	530 mm
Parallel fibers	96
Max. Ø allocation	51 mm
Wide of the panel inclusion	41 mm
Max. panel thickness for inclusion	2 mm

FO Cables

Mechanical characteristics

Temperature range	Storage -25 to +70°C, IEC 60794-1-2 F1
	Pulling in -10 to +50°C
	Operation -25 to +60°C
Tensile performance	IEC 60794-1-2 E1
Crush resistance	IEC 60794-1-2 E3
Impact	IEC 60794-1-2 E4
Repeated bending	IEC 60794-1-2 E6
Torsion	IEC 60794-1-2 E7
Bend	IEC 60794-1-2 E11
Water penetration	IEC 60794-1-2 F5

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General characteristics

Sheath colour	green, similar to RAL 6016
Zero halogen, non corrosive gases	IEC 60754-1/-2, EN 50267-2-1/-2-2, VDE 0482-267-2-1/-2-2
Flame retardant	IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2
Fire resistant (no flame propagation)	IEC 60332.3 C, EN 50266-2-4, VDE 0482-266-2-4
Minimum smoke emission	IEC 61034-1/-2, EN 61034-1/-2 (EN 50268-1/-2), VDE 0482-1034-1/-2 (VDE 0482-268-1/-2)

Cabletype	Universal U-DQ(ZN)BH for indoor and outdoor use
	non metallic, dry interstices, rodent protection, flame retardant, in accordance with IEC 60332.1 and IEC 60332.3 C
Fibertype	Corning G50/125 OM2
No. of fibers	96
Loose tube	8
Sheath ø	13.5 mm
Weight	198 kg/km
Bending radius	205 mm
Tensile load	6000 N
Crush resistance	3000 N continuous
	5000 N short term
Fire load	808 kWh/km
	3200 MJ/km

Length tolerances (prefabricated with plugs)

Tolerances for lengths up to 40m	± 100 cm
Tolerances for lengths up to 100m	± 100 cm
Tolerances for lengths from 100m	± 2%

FO Fiber

Optical properties

Attenuation typical (cabled)	850 nm: 2.5 / 1300 nm: 0.5 dB/km
Attenuation maximum (cabled)	850 nm: 2.7 / 1300 nm: 0.7 dB/km
OFL bandwidth as per TIA/EIA 455-204 and IEC 60793-1-41	850 nm: 700 / 1300 nm: 500 MHz x km
High-Performance EMB bandwidth as per TIA/EIA 455-220A and IEC 60793-1-49	850 nm: 850 MHz x km
Refractive Index	850 nm: 1.480 / 1300 nm: 1.479

Technical properties

Bending radius		No. of windings (turns)	Max. induced attenuation

FO Universal Cable 96x E2000/96x E2000 96G50/125µ OM2 LSHF, Length: xxxx

37.5 mm		100	850 nm: ≤ 0.05 / 1300 nm: ≤ 0.15 dB/km
15 mm		2	850 nm: ≤ 0.1 / 1300 nm: ≤ 0.3 dB/km
7.5 mm		2	850 nm: ≤ 0.2 / 1300 nm: ≤ 0.5 dB/km

Geometrical and mechanical characteristics

Numerical Aperture	0.200 +/- 0.015
Core Ø	50.0 +/- 2.5 µm
Maximum Core Non-Circularity	5 %
Cladding Ø	125.0 +/- 1.0 µm
Maximum Cladding Non-Circularity	1.0 %
Maximum Cladding/Core Concentricity Error	1.5 µm
Maximum Coating Concentricity Error	12 µm
Coating Ø	242 +/- 5 µm
Test load	100 kpsi

Product variants & accessories

Art.-No.	Description
L-E2/E2-50B12Gxxxx	FO Universal Cable 12x E2000/12x E2000 12G50/125µ OM2 LSHF, Length: xxxx
L-E2/E2-50B24Gxxxx	FO Universal Cable 24x E2000/24x E2000 24G50/125µ OM2 LSHF, Length: xxxx
L-E2/E2-50B48Gxxxx	FO Universal Cable 48x E2000/48x E2000 48G50/125µ OM2 LSHF, Length: xxxx
L-E2/E2-50B72Gxxxx	FO Universal Cable 72x E2000/72x E2000 72G50/125µ OM2 LSHF, Length: xxxx
L-E2/E2-50B96Gxxxx	FO Universal Cable 96x E2000/96x E2000 96G50/125µ OM2 LSHF, Length: xxxx