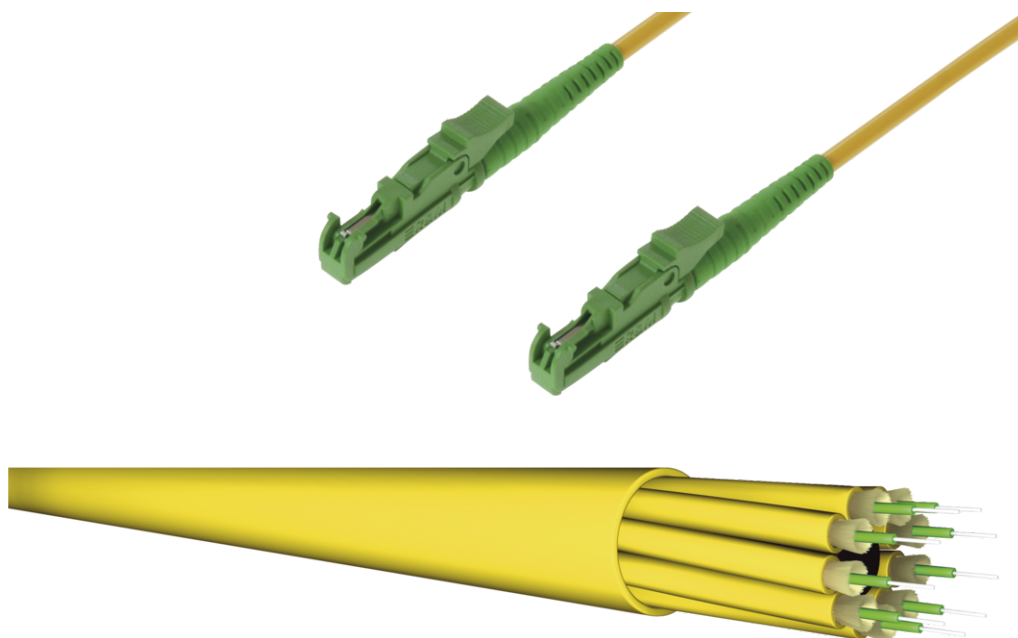


FO BreakoutI cable 24x E2000 APC/24x E2000 APC 24E9/125µ OS2 LSHF, Length: xxxx



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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FO BreakoutI cable 24x E2000 APC/24x E2000 APC 24E9/125μ OS2 LSHF, Length: xxxx

Technical Data

FO Connectors

Type	E2000 APC
Ferrule	Ceramic
Ferrule Hole	125.5 μ
Ferrule Concentricity	≤ 0.6 μ
Connector colour	Green
Lever Colour	Green
Boot colour	Green
Manufacturer	RDM

Optical performance

Fiber	Type	Wavelength	Insertion loss typ.	Insertion loss max.	Return loss min.
9/125μ	E2000 APC	1550 nm	≤ 0.10 dB	0.25 dB	75 dB

FO Cables

Cable data

Fiber amount	24
Outer diameter	12.0 mm
Tolerance	± 0.2 mm

Subcable diameter	1.6 (± 0.1mm)
Strength members	Aramid yarns
Outer jacket	LSOH (Halogen free, low smoke, flame retardant thermoplastic compound)
Jacket colour	Yellow
Standard printing	"t d e – IVHH24E09X-1.6" and sequential meter marking + Lot number

Mechanical/thermal characteristics

Tensile strength	IEC 60794-1-2-E1
Crush test	IEC 60794-1-2-E3
Temperature cycling	IEC 60794-1-2-F1
Operating temperature	-20°C to + 60°C

Special features

Identification	Numbers, min. every 25mm on subcables
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FO BreakoutI cable 24x E2000 APC/24x E2000 APC 24E9/125μ OS2 LSHF, Length: xxxx

FO Fiber

Type	Corning ClearCurve XB 09/125μ G.657.A singlemode fiber
Maximum Attenuation	At 1310 nm max. 0.33 - 0.35 dB/km At 1383 ± 3 nm max. 0.31 - 0.35 dB/km At 1490 nm max. 0.21 - 0.24 dB/km At 1550 nm max. 0.19 - 0.20 dB/km At 1625 nm max. 0.20 - 0.23 dB/km
Attenuation vs. Wavelength	Range: 1285 - 1330 nm; Ref. λ: 1310 nm; Max. Difference: 0.03 dB/km Range: 1525 - 1575 nm; Ref. λ: 1550 nm; Max. Difference: 0.02 dB/km
Macrobend Loss	Mandrel Diameter: 10mm; Number of Turns: 1; Wavelength: 1550nm; Induced Attenuation: 0.5 dB Mandrel Diameter: 10mm; Number of Turns: 1; Wavelength: 1625nm; Induced Attenuation: 1.5 dB
Point Discontinuity	Wavelength: 1310 nm; Point Discontinuity: ≤ 0.05 dB Wavelength: 1550 nm; Point Discontinuity: ≤ 0.05 dB
Cable Cutoff Wavelength (λ _{ccf})	λ _{ccf} ≤ 1260 nm
Mode-Field Diameter	At 1310 nm = 8.6 ± 0.4 μm At 1550 nm = 9.8 ± 0.5 μm
Dispersion	At 1550 nm = ≤ 18.0 [ps/(nm*km)] At 1625 nm = ≤ 22.0 [ps/(nm*km)]
	Zero Dispersion Wavelength (λ ₀): 1304 nm ≤ λ ₀ ≤ 1324 nm Zero Dispersion Slope (S ₀): ≤ 0.089 ps/(nm ² *km)
Polarization Mode Dispersion (PMD)	PMD Link Design Value = ≤ 0.06 ps/√km Maximum Individual Fiber = ≤ 0.1 ps/√km

Dimensional Specifications

Fiber Curl	≥ 4.0 m radius of curvature
Cladding Diameter	125.0 ± 0.7 μm
Core-Clad Concentricity	≤ 0.5 μm
Cladding Non-Circularity	≤ 0.7%
Coating Diameter	242 ± 5 μm
Coating-Cladding Concentricity	< 12 μm

Environmental Specifications

Environmental Test	Test Condition	Induced Attenuation 1310 nm, 1550 nm & 1625 nm
Temperature Dependence	-60°C to +85°C	≤ 0.05
Temperature Humidity Cycling	-10°C to +85°C up to 98% RH	≤ 0.05
Water Immersion	23°C ± 2°C	≤ 0.05
Heat Aging	85°C ± 2°C	≤ 0.05
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 GPa).
Length	Fiber lengths available up to 50.4 km/spool.

FO Breakoutl cable 24x E2000 APC/24x E2000 APC 24E9/125μ OS2 LSHF, Length: xxxx

Product variants & accessories

Art.-No.	Description
P-E2A/E2A09V04Exxxx	FO Breakoutl cable 4x E2000 APC/4x E2000 APC 4E9/125μ OS2 LSHF, Length: xxxx
P-E2A/E2A09V08Exxxx	FO Breakoutl cable 8x E2000 APC/8x E2000 APC 8E9/125μ OS2 LSHF, Length: xxxx
P-E2A/E2A09V12Exxxx	FO Breakoutl cable 12x E2000 APC/12x E2000 APC 12E9/125μ OS2 LSHF, Length: xxxx
P-E2A/E2A09V24Exxxx	FO Breakoutl cable 24x E2000 APC/24x E2000 APC 24E9/125μ OS2 LSHF, Length: xxxx