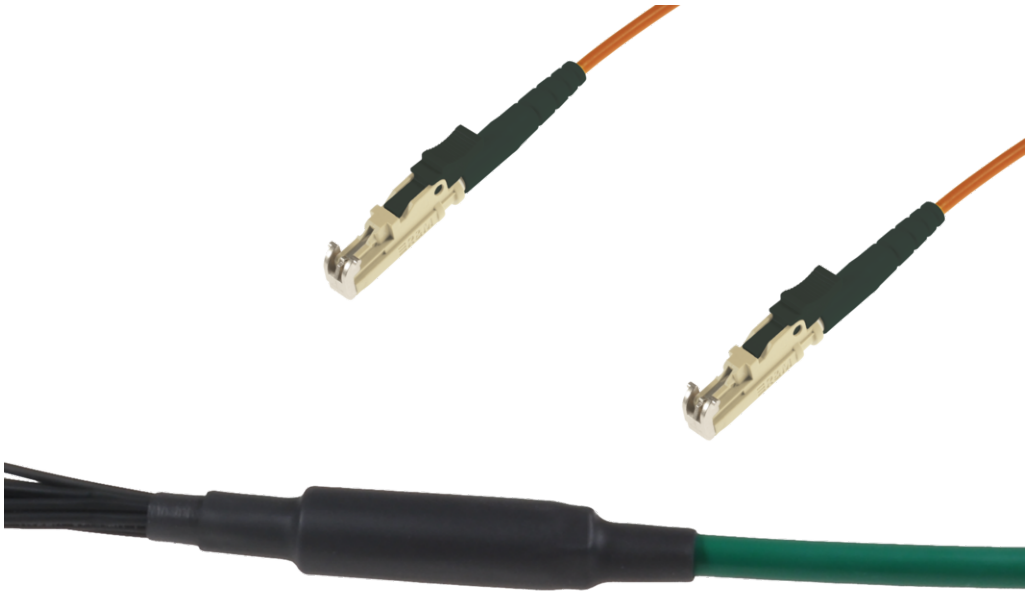
FO Universal Cable 12x E2000/12x E2000 12G50/125µ OM2 LSHF, Length: xxxx



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.

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

 © tde GmbH, all rights reserved, errors excepted.

FO Universal Cable 12x E2000/12x E2000 12G50/125µ OM2 LSHF, Length: xxxx

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 length	50 mm
Ø Fan-out	16 mm
Ø Single unit	1.7 - 2 mm
Single unit length	78 ± 5 cm (not stepped)

FO Cables

Mechanical characteristics

Temperature range	Storage -25 to +70°C, IEC 60794-1-22 F1
	Pulling in -10 to +50°C
	Operation -25 to +60°C
Tensile performance	IEC 60794-1-21 E1
Crush resistance	IEC 60794-1-21 E3
Impact	IEC 60794-1-21 E4
Repeated bending	IEC 60794-1-21 E6
Torsion	IEC 60794-1-21 E7
Bend	IEC 60794-1-21 E11
Water penetration	IEC 60794-1-22 F5

General characteristics

Sheath colour	green, similar to RAL 6016
Zero halogen, non corrosive gases	IEC 60754-1/-2, EN 60754-1/-2, VDE 0482-754-1/-2
Flame propagation	IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2

© tde GmbH, all rights reserved, errors excepted.

FO Universal Cable 12x E2000/12x E2000 12G50/125µ OM2 LSHF, Length: xxxx

Flame spread	IEC 60332-3-24, EN 50266-2-4, VDE 0482-266-2-4
Smoke density	IEC 61034-1/-2, EN 61034-1/-2, VDE 0482-1034-1/-2
Reaction to fire (Euroclasses)	EN 13501-6: D_{ca}-s2,d1,a1

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	12
Loose tube	1
Sheath ø	7.6 mm
Weight	67 kg/km
Bending radius	115 mm
Tensile load short term	3.000 N
Tensile load continuous	1.000 N
Crush resistance short term	5.000 N
Crush resistance continuous	3.000 N
Fire load	275 kWh/km
	990 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
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

© tde GmbH, all rights reserved, errors excepted.

FO Universal Cable 12x E2000/12x E2000 12G50/125µ OM2 LSHF, Length: xxxx

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

© tde GmbH, all rights reserved, errors excepted.