

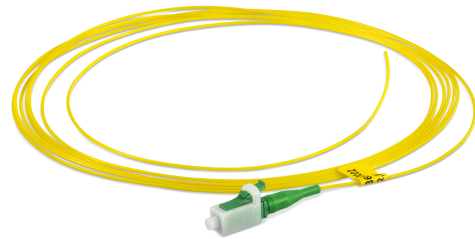
PRODUCTPROFILE

Catalogue number: 087A1746

Partnumber: 712289

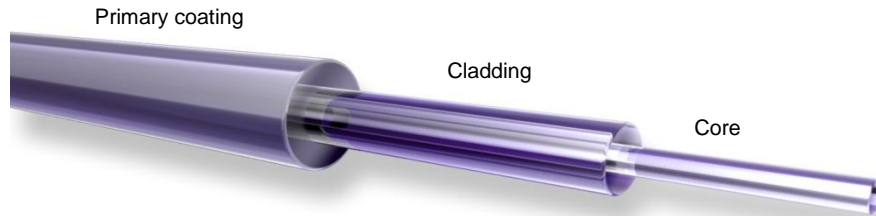
Cable semi-tight buff.fiber,E9/125µm

LWL Aderpigtail
Stecksystem: LC-APC, SM
Kabeltyp: I-VH 1 E9/125µ,
Kompaktader
Länge: 2,5 m



Related documents:

DS_FASER G657A1_OE Fiber Data Sheet
DS_LC_SIMPLEXDUPLEX_STECKER_OI Steckerdatenblatt



Standards

Stepped index fiber 9/125µm according to
 -ISO/IEC 11801 und EN 50173-1 OS2
 -IEC 60793-2-50 type B1.3
 -ITU G.657.A1 und G.652.D

Structure

Silica fiber with two layer acrylate primary coating

Geometrical properties

Modefield diameter @1310 nm	9.2 µm +/- 0.4 µm
Modefield diameter @1550 nm	10.4 µm +/- 0.5 µm
Cladding diameter	125 µm +/- 0.07 µm
Cladding non-circularity	≤ 0.7 %
Core-Cladding concentricity	≤ 0.5 µm
Primary coating diameter	242 µm +/- 5 µm
Coating-Cladding concentricity	< 12 µm

Mechanical properties

Break strength SCREEN-Test 1 % strain for 1 s @100 kpsi

Thermal properties

Operating temperature range -60 to +85°C

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Transmission characteristics

Attenuation:

- Cabled fiber tight buffered:** @ 1310 nm max. 0.38 dB/km
@ 1550 nm max. 0.28 dB/km
- Cabled fiber loose tube:** @ 1310 nm max. 0.36 dB/km
@ 1550 nm max. 0.22 dB/km
- Uncabled fiber:** @ 1310 nm max. 0.32 dB/km
@ 1383 nm max. 0.32 dB/km
@ 1490 nm max. 0.21 dB/km
@ 1550 nm max. 0.18 dB/km
@ 1625 nm max. 0.20 dB/km

Macrobending, induced attenuation, uncabled fiber:

- Radius 10 mm, 1 turn, @ 1550 nm ≤ 0.50 dB
- Radius 10 mm, 1 turn, @ 1625 nm ≤ 1.50 dB
- Radius 15 mm, 10 turns, @ 1550 nm . 0.05 dB
- Radius 15 mm, 10 turns, @ 1625 nm ≤ 0.30 dB
- Radius 25 mm, 100 turns, @ 1310, 1550 und 1625 nm ≤ 0.01 dB

Dispersion:

- @ 1285 - 1330 nm ≤ 3.0 ps/(nm*km)
- @ 1550 nm ≤ 18.0 ps/(nm*km)
- @ 1625 nm ≤ 22.0 ps/(nm*km)

Polarization Mode Dispersion (PMD):

- PMD Link Design Value ≤ 0.04 ps/√km
- Maximum individual fiber PMD ≤ 0.1 ps/√km

Cut-off-Wavelength: ≤ 1260 nm

Effective group index of refraction:

- @ 1310 nm 1.4676
- @ 1550 nm 1.4682

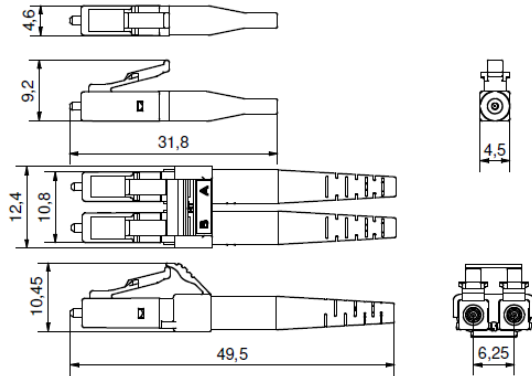
Backscatter attenuation @ 1ns pulse width:

- @ 1310 nm -77 dB
- @ 1550 nm -82 dB
- @ 1625 nm -83 dB

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Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
H. Jungbäck	12-04-15	P. Maier	12-04-15	001	without	H. Jungbäck	12-04-15

LC-Simplex/Duplex connector



Properties and applications

- LC-Simplex/Duplex connectors for fiber optic cabling in broadband networks (telecom, MAN, WAN, CATV, GPON, FTTA, FTTx), building cabling (LAN, campus), data center, industry, laboratory and medical technology
- for cables with single core elements 600/900µm (e.g. buffered fiber for pigtails, breakout, mini breakout, figure "0" and figure "8" cables)
- A/B polarity of duplex connectors easily changeable without tools
- Translucence protection cap, fast and secure to handle and permeable for the light of laser pointers (visual fault locators)

Standards

LC-Simplex/Duplex connector according to IEC/DINEN 61754-20 and EIA/TIA 604-10

Material

- Ferrule: Zirconia ceramic, Ø 1.25 mm
- Body: PEI, flammability UL94-V0
- Boot: TPE, flammability UL94-V0
- Protection cap: POM, flammability UL94-HB

Optical properties

The quality feature of the connector at your product is identified by the part number:

- BASIC: Part numbers like XXXAXXXX
- PURE: Part numbers with "P" at their end, XXXAXXXXP

Details about PURE see Produktinfo_Qualitätsmerkmal-PURE_od

Insertion Loss IL acc. to IEC61300-3-4, Method B, against reference, maximum [dB]:

	Quality feature	BASIC	PURE
- Singlemode SM, 9/125µm		0,30	0,20
- Multimode low IL OM2, OM3, OM4, OM5, 50/125µm		0,15	0,15

Insertion Loss IL „random mated“ acc. to IEC61300-3-34, Method 2, [dB]:

Qualitätsmerkmal BASIC	Mittelwert	Maximum
- Singlemode SM, 9/125µm	0,13	0,50
- Multimode low IL OM2, OM3, OM4, OM5, 50/125µm	0,03	0,27

Insertion Loss IL quality feature PURE "random mated" application limit value, maximum [dB]:

- Singlemode SM, 9/125µm	97%	0,25
- Multimode low IL OM2, OM3, OM4, OM5, 50/125µm	100%	0,40

GHMT PVP certificate
No.: c5711X-XX
No.: c5937X-XX



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LC-Simplex/Duplex connector

Optical properties

Return Loss RL acc. to IEC61300-3-6, Method 1, against reference, minimum [dB]:

	Quality feature	BASIC	PURE
- Singlemode SM, 9/125µm, PC 0°		45	45
- Singlemode SM, 9/125µm, UPC 0°		55	55
- Singlemode SM, 9/125µm, APC 8°		65	70
- Multimode all 50µ OM classes		35	40

Mechanical properties

- Mating cycles min. 1000, IL increase < 0.2 dB
- Strain relief max. 100 N, dependent on cable type

Thermal properties

- Operation temperature range -40°C to +85°C, dependent on cable type
- Storage temperature range -40°C to +85°C

Cable diameters

- Round cable types Ø 0,9 bis 3.0 mm
- Hotmelt Duplex Ø 4,8 ~ 7.0mm

Colors

Connector body / boot:

- Singlemode SM, 9/125µm, PC and UPC 0° blue / blue
- Singlemode SM, 9/125µm, APC 8° green / green
- Multimode OM2, OM3, OM4, OM5, 50/125µm black / black

Polarity change

Step 1: Remove duplex clip

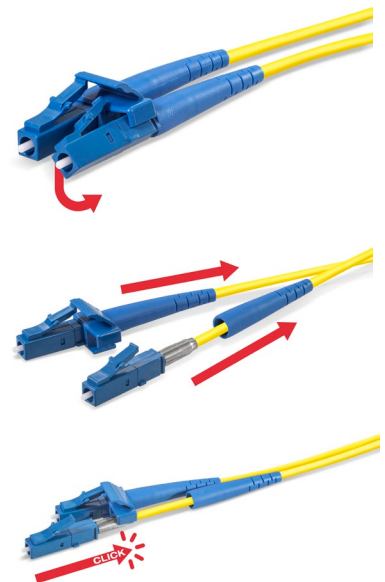
- When changing polarity, the release levers should be facing up as shown in the picture.
- Remove one of two simplex connectors from the duplex clip by pressing down and out, supported by a slight tilt movement.
- Then release the second simplex connector from the duplex clip in a similar manner.

Step 2: Reattach duplex clip

- Push back the boot of both simplex connectors
- Reattach the duplex clip over the simplex connectors that have been changed in position and insert the simplex connectors (a click is noticeable).

Step 3: Final assembly duplex connector

- Slide the boot of both simplex connectors to their original position.



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Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
S. Wiener	16.03.2021	H. Jungbäck	2021-03-16	003		H. Jungbäck	2022-10-07

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