

## PRODUCTPROFILE

**Catalogue number: 036A0503OM3**

Partnumber: 746382

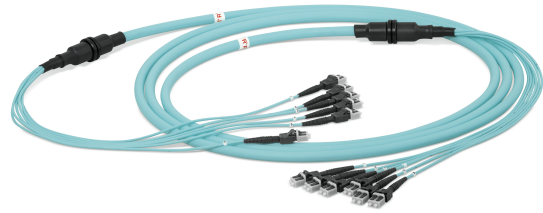
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PreCONNECT® BREAKOUT MULTIJUMPER  
6 channels, 12 fibers, 50/125µmOM3, aqua  
with square-interfaces

Connector side A: LC-Compact MM

Connector side B: LC-Compact MM

Cable I-V(ZN)HH6x2G50/125µm,OM3



### **Related documents:**

DS\_FASER OM3BI\_OE

Fiber Data Sheet

DS\_I-VZNHHNX2X900X28\_L\_OE

Kabeldatenblatt

DS\_LC\_COMPACT\_STECKER\_SHORT\_C

Steckerdatenblatt



**Standards**

- Graded index fiber 50/125µm according to
- ISO/IEC 11801 and EN 50173-1 OM3
- IEC 60793-2-10 type A1a.2
- ITU G.651.1
- TIA/EIA 492AAAC-B

**Structure**

Silica fiber with two layer acrylate primary coating

**Geometrical properties**

Core diameter	50 µm +/- 2.5 µm
Cladding diameter	125 µm +/- 1 µm
Core non-concentricity	< 5 %
Cladding non-circularity	< 1 %
Core-Cladding concentricity	< 1.5 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:**

@ 850 nm max. 2.3 dB/km  
@ 1300 nm max. 0.6 dB/km

**Macrobanding, induced attenuation:**

100 turns, 37.5 mm  $\leq$  0.05 dB @ 850 nm  
100 turns, 37.5 mm  $\leq$  0.15 dB @ 1300 nm  
2 turns, 15 mm  $\leq$  0.1 dB @ 850 nm  
2 turns, 15 mm  $\leq$  0.3 dB @ 1300 nm  
2 turns, 7.5 mm  $\leq$  0.2 dB @ 850 nm  
2 turns, 7.5 mm  $\leq$  0.5 dB @ 1300 nm

**Bandwidth (Overfilled launch):**

@ 850 nm min. 1500 MHz x km  
@ 1300 nm min. 500 MHz x km

**Effective modal Bandwidth-length-product (EMB):**

@ 850 nm min. 2000 MHz x km

**Numerical aperture: 0.200 +/- 0.015**

**Effective group index of refraction:**

@ 850 nm 1.480  
@ 1300 nm 1.479

**Backscatter attenuation @ 1ns pulse width:**

@ 850 nm -68 dB  
@ 1300 nm -76 dB

**Maximum possible transmission channels lengths:**

**Ethernet:**

1 GBE 1000BASE-SX: min. 1000 m @ max. 3.56 dB channel attenuation <sup>1)</sup>  
10 GBE 10GBASE-SR: min. 300 m @ max. 2.60 dB channel attenuation <sup>2)</sup>  
40 GBE 40GBASE-SR4: min. 140 m @ max. 1.90 dB channel attenuation <sup>1)</sup>  
100 GBE 100GBASE-SR10: min. 140 m @ max. 1.90 dB channel attenuation <sup>1)</sup>

**Fibre Channel:**

8 GFC (800-SN): min. 200 m @ max. 1.62 dB channel attenuation <sup>1)</sup>  
16 GFC (1600-SN): min. 125 m @ max. 1.39 dB channel attenuation <sup>1)</sup>

<sup>1)</sup> Inclusive max. 1.0 dB for connections (connectors and splices)

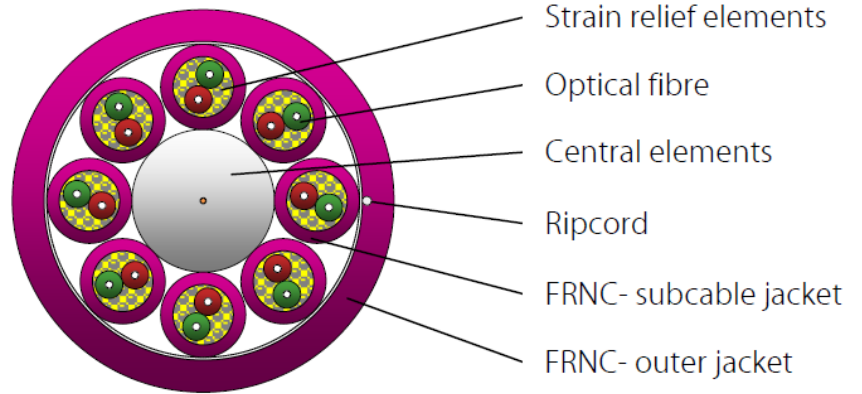
<sup>2)</sup> Inclusive max. 1.5 dB for connections (connectors and splices)

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Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
H. Jungbäck	10-26-15	P. Maier	10-27-15	004	without	H. Jungbäck	10-26-15

Fiber Optic Cable  
I-V(ZN)HH n x 2 x 900 x 2.8

036AXXXX



**Standards**

-IEC 60794-2-20

**Structure**

Subcable:

- 2 buffered optical fibers 0.9mm within a subcable filled with Aramid strain relief elements with outer diameter 2.8 mm, numbering 1 to n
- Buffered fiber color code: Multimode 50/125µm = red and green; Singlemode 9/125µm = red and yellow
- Jacket material FRNC-LSZH flame-retardant and halogen-free, wall thickness 0.4 mm

Stranding:

- Subcable stranded in one layer over central element

Outer jacket:

- FRNC-LSZH flame-retardant and halogen-free material

-Standard jacket colors:

- Singlemode: yellow
- Multimode OM2: orange or green
- Multimode OM3: aqua (turquoise)
- Multimode OM4: violet

- Ripcord below jacket
- Inkjet marking black acc. to separate drawing

**Geometrical properties**

Number of Subcables	Number of fibers	Outer diameter [mm]	Outer jacket wall thickness [mm]	Weight [kg/km]	Max. tensile force acc. to IEC 60794-1-2 E1 [N]
6	12	10.5	0.9	100	800
8	16	12.6	1.1	154	1000
12	24	16.5	1.3	270	1200

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Fiber Optic Cable  
I-V(ZN)HH n x 2 x 900 x 2.8

036AXXXX

**Mechanical properties**

- Min. bending radius fixed (static) acc. IEC 60794-1-2 E11A  
10 x outside diameter
- Min. bending radius during installation (dynamic) with additional tensile strain acc. IEC 60794-1-2 E6  
15 x outside diameter
- Max. crush resistance acc. IEC 60794-1-2 E3 long term = 1000 N/dm

**Thermal properties**

- Transport and storage - 25°C to + 70°C
- Installation - 5°C to + 50°C
- In use acc. IEC 60794-1-2 F1 - 10°C to + 70°C

**Chemical properties**

No resistance to oil, petrol, acid, leach and water

**Fire performance**

- Flame-retardant acc. to IEC 60332-1-2 and IEC 60332-3-22 Cat. A
- Smoke density acc. to IEC 61034
- Halogen-free acc. to IEC 60754-1
- Acidity of the combustion gases acc. to IEC 60754-2

**Transmission characteristics**

See fiber data sheets

**Applications**

- Breakout indoor cable particularly appropriate for direct assembling of LC-COMPACT, MU-COMPACT and other so called UNIBOOT connectors
- Installation in raised-floors and cable trays

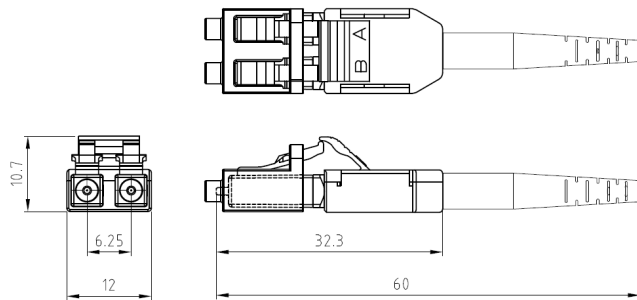
**Deliveryform**

On one-way drums

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Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
H. Jungbäck	2018-01-25	P. Maier	2018-01-25	001	without	---	---

LC-COMPACT Shortboot connector



**Properties and applications**

- LC-Duplex connector with compact and rugged backshell with short central strain relief and boot for round cable (Uniboot)
- A/B polarity can be easily tool-less changed
- The short boot enables the use of the connector in applications with low depth, like ODF Optical Distribution Frames
- Translucence duplex protection cap, fast and secure to handle and permeable for the light of laser pointers (visual fault locators)

**Standards**

LC-Duplex acc. 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 OM1, 62.5/125µm		0.30	---
- 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]:

Quality feature	BASIC	mean value	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.: c6997X-XX**  
**No.: c6998X-XX**



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LC-COMPACT Shortboot 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 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 2.0 to 3.0 mm

**Colors**

Connector body / boot:

- Singlemode SM, 9/125µm, PC and UPC 0° blue / blue
- Singlemode SM, 9/125µm, APC 8° green / green
- Multimode OM1, 62.5/125µm beige / white
- Multimode OM2, OM3, OM4, OM5, 50/125µm black / black

**Polarity change**

1) Remove the connector top cover by inserting a fingernail or a small lever into the crack that separates the two halves.

2) Carefully swap position of the connectors by lifting them up and out of the bottom housing.

3) Reposition the top cover and snap into place.



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H. Jungbäck	2018-12-13	A. Burggraf	2018-12-13	009	----	H. Jungbäck	2022-10-07