

## PRODUCTPROFILE

### Catalogue number: 041A1912OM3

Partnumber: 740332

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PreCONNECT® TRUNK MULTIJUMPER  
24 channels, 48 fibers, 50/125µmOM3, aqua  
Connector side A: LC-Compact MM  
Connector side B: LC-Compact MM  
Cable U-DQ(ZN)BH4x12G50µm,OM3



### **Related documents:**

DS_FASER OM3BI_OE	Fiber Data Sheet
DS_LC_COMPACT_STECKER_SHORT_C	Steckerdatenblatt
DS_U-DQZNBHNXM6000-PVP_L_OE	Kabeldatenblatt



**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>

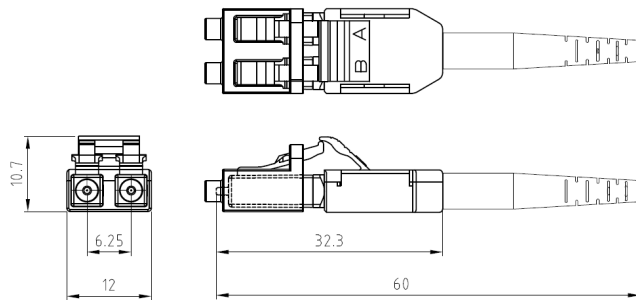
<sup>1)</sup> Inclusive max. 1.0 dB for connections (connectors and splices)

<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

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.

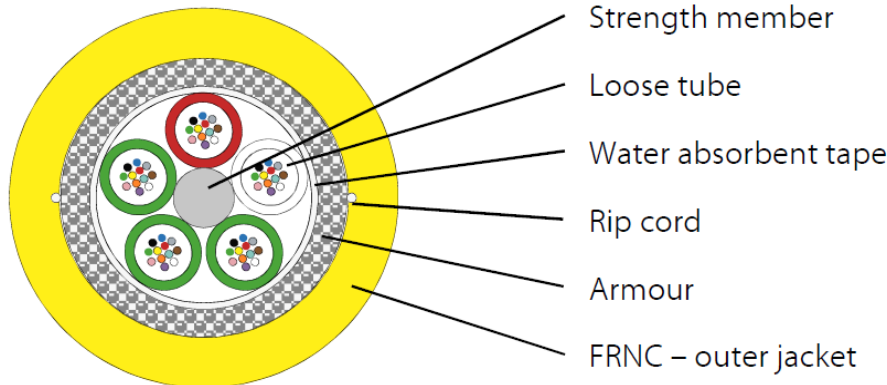
2) Carefully swap position of the connectors by lifting them up and out of the bottom housing.

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



PVP only with singlemode and OM4 fibers

**Standards**

IEC 60794-2  
EN 50575 : 2014 + A1 : 2016: No. of Declaration of Performance CDERF0000019 – V2

**Structure**

- Loose tube**  
Jelly filled loose tube, outer diameter 2.4 mm with 2–12 colour-coded optical fibres  
Fibre colours: red, green, blue, yellow, white, grey, brown, violet, turquoise, black, orange, pink  
Tube colours: counting tube red, counting direction tube white, other tubes yellow (E9/125), green (G50/125), or blue (G62.5/125)
- Stranding**  
Loose tubes and if necessary fillers stranded around a central strength member (FRP). Strength member can be upcoated. With water absorbent tape.
- Armour**  
Multifunctional E-glass yarns, wrapped in two layers (left and right spin), as strain relief elements and non-metallic rodent protection
- Outer jacket**  
Halogen-free and flame-retardant material (FRNC), with approx. 1.6 mm  
Standard colours: Singlemode: yellow  
Multimode 50 µm: orange or green  
Multimode OM3: aqua (turquoise)  
Multimode OM4: violett  
Multimode 62,5 µm: orange  
Marking see separate drawing  
Two diametrically opposed ripcords under the jacket  
Outer diameter see table below

Constr uction	max. no. of fibers	Outer diameter [mm]	Weight [kg/km]	Fire load [MJ/m]	min. bending radius [mm]	
					during installation	installed
1 x m	12	12,5	185	3,10	250	190
2 x m	24	12,5	185	3,10	250	190
3 x m	36	12,5	185	3,10	250	190
4 x m	48	12,5	185	3,10	250	190
5 x m	60	12,5	185	3,10	250	190
6 x m	72	13,4	200	3,20	270	200
8 x m	96	14,4	225	3,40	290	215
10 x m	120	15,9	250	3,70	320	240
12 x m	144	17,7	305	4,50	355	265

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Fiber Optic Cable  
U-DQ(ZN)BH nxm 6000N GHMT PVP certified

030AXXXX

**Mechanical characteristics**

- Max. tensile force acc. IEC 60794-1-2 E1 **6000 N**
- Max. crush resistance acc. IEC 60794-1-2 E3 **3000 N/dm, 10 min.**
- Impact resistance acc. IEC 60794-1-2 E4 **5 impacts, 3.0 Nm, R = 12.5 mm**
- Cable bend acc. IEC 60794-1-2 E11A **1 cycle, R = 10 x outer diam., n = 5 (windings)**
- Longitudinally watertight acc. IEC 60794-1-2 F5A **l = 3 m, t = 24 h**

**Thermal characteristics**

- Transport and storage **- 40 °C to + 70 °C**
- Installation **- 5 °C to + 50 °C**
- In use acc. IEC 60794-1-2 F1 **- 40 °C to + 60 °C**

**Fire performance**

- Cable is 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
- Fire Class according EN 13501-6 E<sub>ca</sub>

**Chemical Characteristics**

No resistance to oil, petrol, acid and leach

**Application**

- Dry, longitudinally waterproof fibre optic cable with non-metallic rodent protection and for higher tensile force
- Good installation through ripcords to open the jacket
- For fixed installation indoor and outdoor, in cable ducts, tubes and cable trays
- Mechanical installation is only permitted when using force measuring devices with recording function
- Not suitable for underground laying (direct buried)

**Packaging**

Disposable drums

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H. Jungbäck	2018-08-13	S. Wiener	2018-08-13	001			