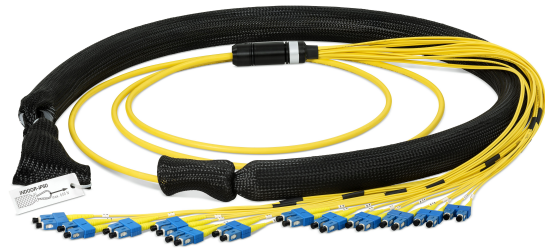


PRODUCTPROFILE

Catalogue number: 041A1788G657A1

Partnumber: 771853

PreCONNECT® TRUNK MULTIJUMPER
12 channels, 24 fibers, 9/125µm, yellow
Connector side A: SC-Duplex
Connector side B: SC-Duplex
Cable U-DQ(ZN)BH24E9/125µm



Related documents:

DS_FASER G657A1_OE

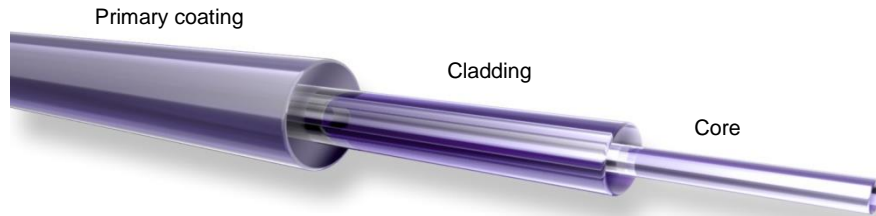
Fiber Data Sheet

DS_SC_STECKER_OE

Steckerdatenblatt

DS_U-DQZNBH2500-PVP_L_OE

Cable Data Sheet



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:

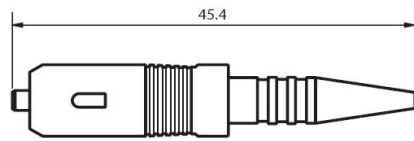
@ 1310 nm 1.4676
@ 1550 nm 1.4682

Backscatter attenuation @ 1ns pulse width:

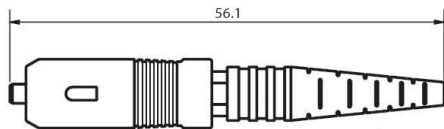
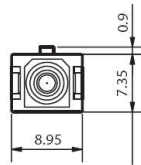
@ 1310 nm -77 dB
@ 1550 nm -82 dB
@ 1625 nm -83 dB

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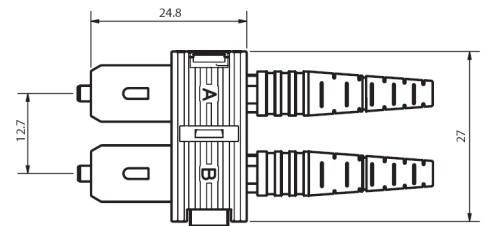
Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
H. Jungbäck	12-04-15	P. Maier	12-04-15	001	without	H. Jungbäck	12-04-15



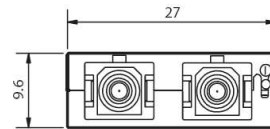
SC-simplex, buffered fiber



SC-simplex, cable



SC-duplex



All dimensions are in mm; tolerances acc. ISO 2768 m-H

Properties

Standard SC connectors for applications in telecommunications, data center, cabling and LAN, connections to active components.

Interface

SC, acc. to IEC 61754-4

Material for connectors

Ferrule : Zirconia ceramic, Ø 2.5 mm
 Body : Plastics
 Boot : Plastics

Optical data

	Typical	max.
Insertion Loss : S/M	0.20 dB	0.40 dB
M/M	0.20 dB	0.40 dB
Return Loss : S/M	≥45 dB(PC), ≥55 dB(UPC), ≥65 dB(APC)	
M/M	≥30 dB	

Mechanical data

Mating cycle ≥ 1000
 Strain relief 100 N(dependent on the cable type)

Environmental data

Operation temperature range -40°C to +85°C
 Storage temperature range -40°C to +85°C

Suitable cables

Cable Types : Ø 0.9 ~ 3.5 mm

Packaging

Standard Packaging.

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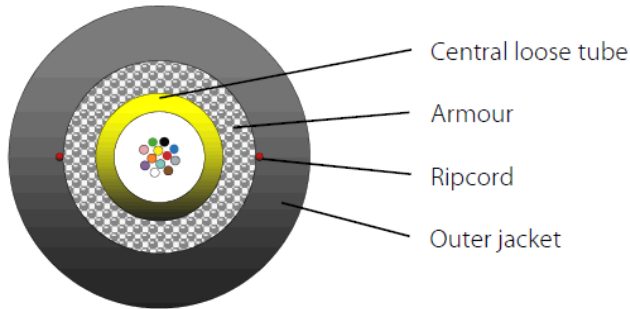
Connector Part	Part No
Connector Body	
Singlemode, PC, blue	98 SCS 120-101
Singlemode, APC, green	98 SCS 110-101
Multimode, 50 µm, black	98 SCS 130-101
Multimode, 62.5 µm, beige	98 SCS 130-102
Duplex clip, black	98 ZD 02-0BK
Crimp sleeve	
for Ø 2.1	98 ZC 05-000
for Ø 2.8-3.5	98 ZC 04-000
Boot, Ø 0.9 mm buffered fiber	
blue	98 ZB 06-0BU
green	98 ZB 06-0GN
black	98 ZB 06-0BK
yellow	98 ZB 06-0YE
red	98 ZB 06-0RD
Boot, Ø 2.1 mm cable	
blue	98 ZB 05-0BU
green	98 ZB 05-0GN
black	98 ZB 05-0BK
yellow	98 ZB 05-0YE
red	98 ZB 05-0RD
Boot, Ø 2.8-3.5 mm cable	
blue	98 ZB 04-0BU
green	98 ZB 04-0GN
black	98 ZB 04-0BK
yellow	98 ZB 04-0YE
red	98 ZB 04-0RD



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Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
Y.Zhang	29.03.2017	H.Jungbäck	29.03.2017	002	---	Y.Zhang	29.03.2017



PVP only with singlemode and OM4 fibers

Standards

- IEC 60794-2
- EN 50575:2014 +A1:2016: Number of Declaration of Performance CDERF0000052-V1

Structure

Loose tube:

- Jelly filled loose tube: 2 to 12 optical fibers diameter 3.5 mm, 14 to 24 optical fibers diameter 4.0 mm
- Fiber color code 1 to 12: red, green, blue, yellow, white, grey, brown, violet, turquoise, black, orange, pink
- Fiber color code 13 to 24: red, green, blue, yellow, white, grey, brown, violet, turquoise, transparent, orange, pink, all with black ring-marking

Armor:

- Multifunctional reinforced E-glass yarns as strain relief elements and non-metallic rodent protection

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
- Wall thickness 1.5 mm
- Two diametrically opposed ripcords below the jacket
- Inkjet marking black acc. to separate drawing

Geometrical properties

Number of fibers	Outer diameter [mm]	Weight [kg/km]	Fire load [MJ/m]
12	8.3	80	1.09
24	8.8	90	1.26

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Mechanical properties

- Min. bending radius fixed (static) acc. IEC 60794-1-2 E11A
15 x outside diameter
- Min. bending radius during installation (dynamic) with additional tensile strain acc. IEC 60794-1-2 E6
20 x outside diameter
- Max. tensile force acc. IEC 60794-1-2 E1 = 2500 N
- Max. crush resistance acc. IEC 60794-1-2 E3 long term = 1500 N/dm, short term = 3000 N/dm
- Longitudinally watertight acc. IEC 60794-1-2 F5A: l=3m, t=24h

Thermal properties

- Transport and storage - 25°C to + 70°C
- Installation - 5°C to + 50°C
- In use acc. IEC 60794-1-2 F1 - 25°C to + 60°C

Chemical properties

- UV resistance
- No resistance to oil, petrol, acid and leach

Fire performance

- Flame-retardant acc. to IEC 60332-1-2 and IEC 60332-3-24 Cat. C
- 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_{CA}/s NPD/d NPD/a NPD
NPD = No Performance Determined

Transmission characteristics

- See fiber data sheets

Applications

- Longitudinally and transversely waterproof fibre optic universal cable with non-metallic rodent protection and higher tensile force
- For fixed installation indoors and outdoors, in cable ducts, tubes and cable trays
- Suitable for underground laying (direct buried)
- Mechanical installation is only permitted when using force measuring devices with recording function

Deliveryform

- On one-way drums

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H. Jungbäck	2017-08-18	P. Maier	2017-08-18	003	without	H. Jungbäck	2018-08-13