

PRODUCTPROFILE

Catalogue number: 062A1741OM4

Partnumber: 753529

Fiber optic duplex patchcord
Connector side A: SC-Duplex
Connector side B: SC-Duplex
50/125µmOM4, double jacket 2x2.1/3.3x5.2mm,
violet
Polarity: crossed A to B
Cable I-V(ZN)HH2x2,1G50/125µm,OM4



Related documents:

DS_FASER OM4BI_OE

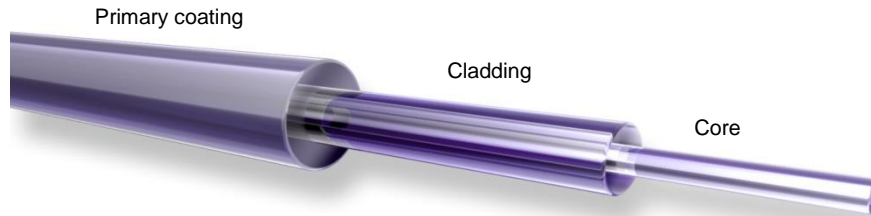
Fiber Data Sheet

DS_I-VZNHH2X21_900_L_OE

Cable Data Sheet

DS_SC_STECKER_OE

Steckerdatenblatt



Standards

Graded index fiber 50/125µm according to
 -ISO/IEC 11801 und EN 50173-1 OM4
 -IEC 60793-2-10 type A1a.3
 -ITU G.651.1
 -TIA/EIA 492AAAD

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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Optical fiber OM4
bend insensitive

059A0381OM4BI

Transmission characteristics

Attenuation:

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

Macrobending, 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. 3500 MHz x km
@ 1300 nm min. 500 MHz x km

Effective modal Bandwidth-length-product (EMB):

@ 850 nm min. 4700 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 100GBASE-SX: min. 1100 m @ max. 3.56 dB channel attenuation ¹⁾
10 GBE 10GBASE-SR: min. 550 m @ max. 2.60 dB channel attenuation ¹⁾
40 GBE 40GBASE-SR4: min. 170 m @ max. 1.50 dB channel attenuation ¹⁾
100 GBE 100GBASE-SR10: min. 170 m @ max. 1.50 dB channel attenuation ¹⁾

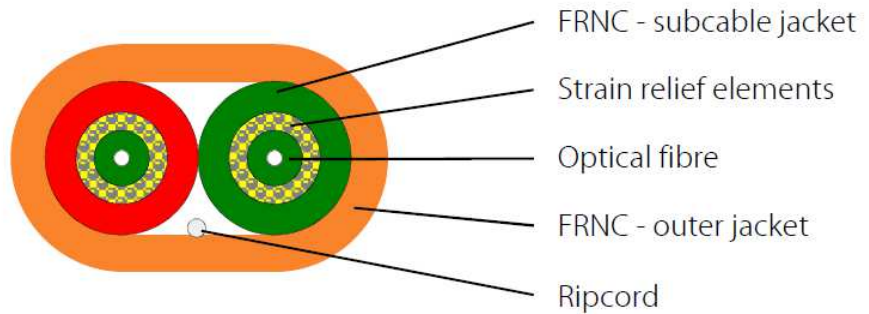
Fibre Channel:

8 GFC (800-SN): min. 245 m @ max. 1.76 dB channel attenuation ¹⁾
16 GFC (1600-SN): min. 165 m @ max. 1.51 dB channel attenuation ¹⁾

¹⁾ Inclusive max. 1.0 dB for connections (connectors and splices)

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



Standards

IEC 60794-2

Structure

Cable core:
buffered optical fiber, outer diameter 0.9 mm
colour: yellow (E9/125), green (G50/125), blue (G62.5/125)
Strain relief elements (aramid) Subcable-jacket halogen-free and flame-retardant material,
wall thickness approx. 0.3 mm,
colour: orange at multi-mode and yellow at single-mode
Outer diameter: 2.1 mm

Outer jacket:
Two break-out subcables parallel
Halogen-free and flame-retardant material (FRNC), wall thickness approx. 0.44 mm
Outer diameter approx. 3.3 mm x 5.2 mm

Standard colours:
Singlemode: yellow
Multimode 50 µm: orange or green
Multimode OM3: aqua (turquoise)
Multimode 62.5 µm: orange
Multimode OM4: violet

Ripcord under the jacket
Inkjet marking black acc. to separate drawing

Geometrical properties

Number of fibers	Outer diameter [mm]	Weight [kg/km]	Fire load [MJ/m]
2	3.3 x 5.2	19	0.63

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Fiber Optic Cable
I-V(ZN)HH 2x 2.1mm... 900µm

033AXXXX

Mechanical properties

Min. bending radius (over the flat side) for cables with standard fibers

static	35mm
dynamic	65mm
Max. pull force	600 N
Max. crush resistance long term	400 N/dm

Thermal properties

Transport and storage	- 25°C to + 70°C
Installation	- 5°C to + 50°C
In use	- 5°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

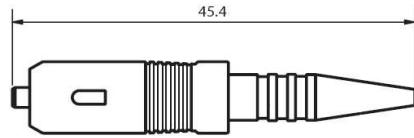
Indoor cable for the installation in cable ducts and in tubes and also suitable for interconnections
For direct connector assembly
Ideal for fiber to the desk

Deliveryform

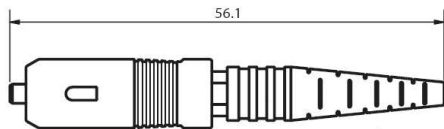
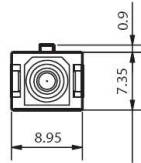
Disposable drums

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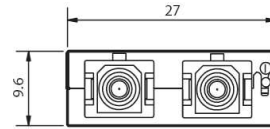
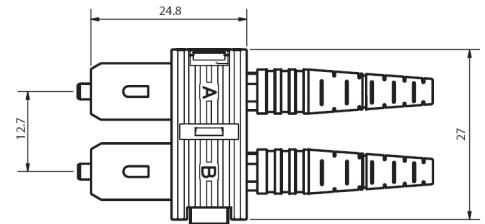
Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
P. Maier	03.08.2016	H. Jungbäck	03.08.2016	001	without	Y. Zhang	22.06.2017



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

Insertion Loss :	S/M	Typical	max.
	M/M	0.20 dB	0.40 dB
		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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Y.Zhang	29.03.2017	H.Jungbäck	29.03.2017	002	---	Y.Zhang	29.03.2017