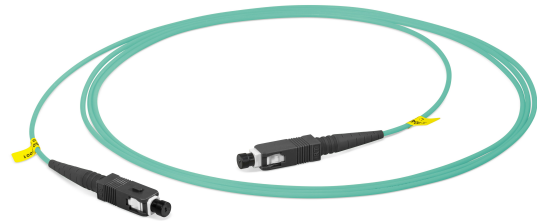


PRODUCTPROFILE

Catalogue number: 062A01050M3

Partnumber: 721569

Fiber optic simplex patchcord
Connector side A: SC-Simplex
Connector side B: SC-Simplex
50/125µmOM3, 2.1mm, aqua
Cable I-V(ZN)H1x2,1G50/125µmOM3



Related documents:

DS_FASER OM3BI_OE

DS_I-VZNH1X21STB900_L_OD

DS_I-VZNH1X21STB900_L_OE

DS_SC_STECKER_OE

Fiber Data Sheet

Kabeldatenblatt

Cable Data Sheet

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

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. 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 ¹⁾
10 GBE 10GBASE-SR: min. 300 m @ max. 2.60 dB channel attenuation ²⁾
40 GBE 40GBASE-SR4: min. 140 m @ max. 1.90 dB channel attenuation ¹⁾
100 GBE 100GBASE-SR10: min. 140 m @ max. 1.90 dB channel attenuation ¹⁾

Fibre Channel:

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

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

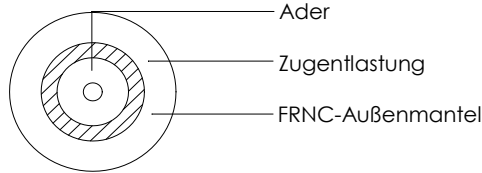
²⁾ Inclusive max. 1.5 dB for connections (connectors and splices)

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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

LWL-KABEL

I-V(ZN)H 1x2,1mm ... STB 900µm



Normen

IEC 60794-2

Aufbau

Kabelseele:

STB900 = Semilose Vollader, gelgefüllt, Dm. 0,9 mm
Farbe: gelb (E9/125), grün (G50/125), blau (G62,5/125)

Zugentlastungselemente Aramid

Außenmantel:

Halogenfreies und flammwidriges Material, Wandstärke ca. 0,4 mm
Standardfarben: Singlemode: gelb
Multimode 50 µm: orange oder grün
Multimode OM3: aqua (türkis)
Multimode 62,5 µm: orange
Multimode OM4: violett

Andere Farben auf Anfrage

Außendurchmesser 2,1 mm
Beschriftung siehe gesonderte Zeichnung

Mechanische Eigenschaften

Biegeradius min.	
Verlegt	30 mm
Bei Verlegung	60 mm
Mit Faser G.657.A	
Verlegt	15 mm
Bei Verlegung	30 mm
Zugkraft dauernd max.	300 N
Querdruckfestigkeit dauernd max.	100 N/dm
Kabelgewicht	ca. 5,1 kg/km

Thermische Eigenschaften

Transport und Lagerung	- 25 °C bis + 70 °C
Verlegung	- 5 °C bis + 50 °C
Im Betrieb nach IEC 60794-1-2 F1	- 10 °C bis + 70 °C

Chemische Eigenschaften

Keine Beständigkeit gegen Öl, Benzin, Säuren und Laugen

Brandverhalten Eigenschaften

Flammwidrigkeit	nach IEC 60332-1-2 und IEC 60332-3-22 Kat. A
Rauchdichte	nach IEC 61034-1 und IEC 61034-2
Halogenfreiheit	nach IEC 60754-2
Keine korrosiven und toxischen Brandgase	
Brandlast	0,12 MJ/m

Übertragungseigenschaften

Siehe Faserdatenblätter

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LWL-KABEL
I-V(ZN)H 1x2,1mm ... STB 900µm

Anwendungsbereiche

Für ortsfeste Verlegung in Kabelkanälen und Rohren sowie für Rangierzwecke
Für direkte Steckerkonfektion

Lieferform

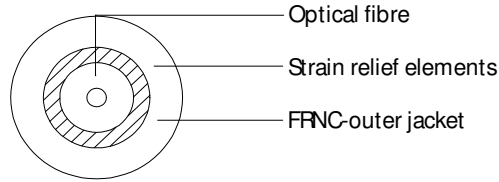
Auf Einwegtrommeln

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Gezeichnet	Datum	Freigegeben	Datum	Rev.	Änderungsnummer	Name	Datum
H.Jungbäck	02.09.2005	H. Jungbäck	13.07.2015	005	ohne	Y. Zhang	01.06.2017

Fiber Optic Cable
I-V(ZN)H 1x 2.1mm... STB900



Standards

IEC 60794-2

Structure

Cable core STB900 = Semi tight buffered optical fibre, gel-filled, outer diameter 900 µm
colour: yellow (E9/125), green (G50/125), blue (G62.5/125)
Strain relief elements (aramid)

Outer jacket: Halogen-free and flame-retardant material, approx. 0.4 mm wall,
Standard colours: Singlemode: yellow
Multimode 50 µm: orange or green
Multimode OM3: aqua (turquoise)
Multimode 62,5 µm: orange
Multimode OM4: violet

Other colours on request
Outer diameter 2.1 mm
Marking see separate drawing

Mechanical properties

Min. bending radius	static	30mm
	dynamic	60mm
Min. bending radius with G657A	static	15mm
	dynamic	30mm
Max. pull force		200 N
Max. crush resistance long term		100 N/dm
Weight		5.1 kg/km approx.

Thermal properties

Transport and storage	- 25°C to + 70°C
Installation	- 5°C to + 50°C
In use	- 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
- Fire Load 0.12 MJ/m

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Fiber Optic Cable
I-V(ZN)H 1x 2.1mm... STB900

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

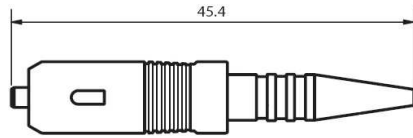
Deliveryform

Disposable drums

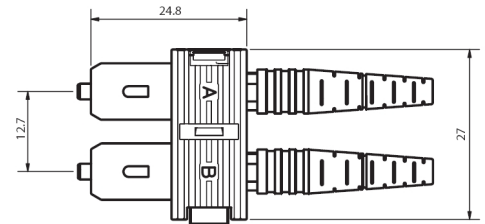
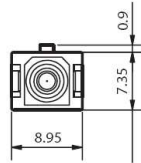
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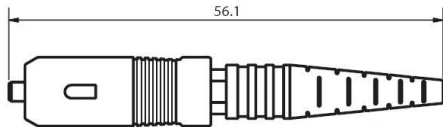
Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
H. Jungbäck	02.09.2005	DE	13.07.2015	005	without	Y. Zhang	22.06.2017



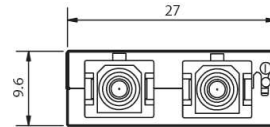
SC-simplex, buffered fiber



SC-duplex



SC-simplex, cable



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
Return Loss :	S/M	0.20 dB	0.40 dB
	M/M	≥45 dB(PC), ≥55 dB(UPC), ≥65 dB(APC)	
		≥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