

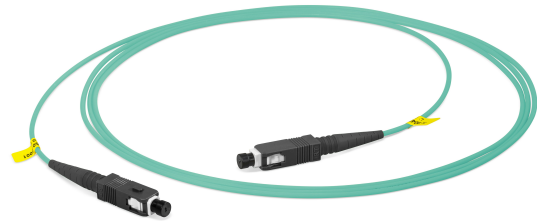
## PRODUCTPROFILE

### Catalogue number: 062A01100M3

Partnumber: 750942

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Fiber optic simplex patchcord  
Connector side A: SC-Simplex  
Connector side B: SC-Simplex  
50/125µmOM3, 2.8mm, aqua  
Cable I-V(ZN)H1x2,8G50/125µm,OM3



#### **Related documents:**

DS\_FASER OM3BI\_OE

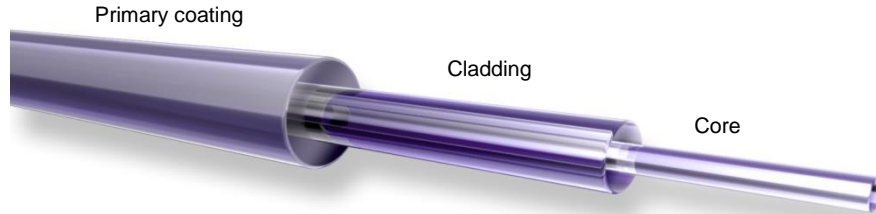
Fiber Data Sheet

DS\_I-VZNH1X28STB900\_L\_OE

Cable Data Sheet

DS\_SC\_STECKER\_OE

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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Optical fiber OM3  
bend insensitive

059A0381OM3BI

**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>

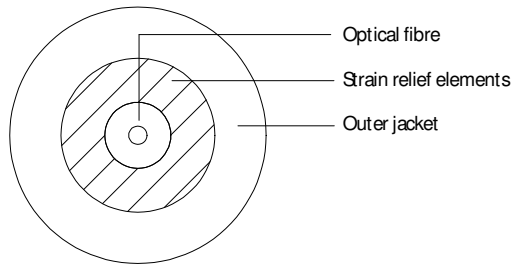
<sup>1)</sup> Inclusive max. 1.0 dB for connections (connectors and splices)

<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)H 1x 2.8mm... 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. 0.5 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 2.8 mm  
Marking see separate drawing

**Mechanical properties**

<b>Min. bending radius</b>	static	30mm
	dynamic	60mm
<b>Min. bending radius with G657A</b>	static	15mm
	dynamic	30mm
<b>Max. pull force</b>		400 N
<b>Max. crush resistance long term</b>		150 N/dm
<b>Weight</b>		7.9 kg/km approx.

**Thermal properties**

<b>Transport and storage</b>	- 25°C to + 70°C
<b>Installation</b>	- 5°C to + 50°C
<b>In use</b>	- 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 0.18 MJ/m

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**Fiber Optic Cable**  
I-V(ZN)H 1x 2.8mm... 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**

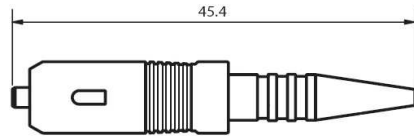
**Deliveryform**

**Disposable drums**

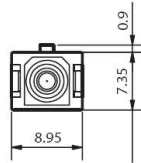
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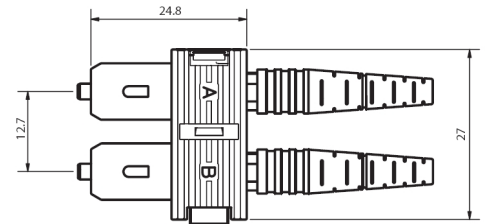
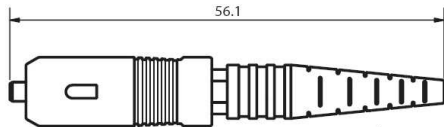
Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
H. Jungbäck	02.09.2005	DE	13.07.2015	004	without	Y. Zhang	22.06.2017



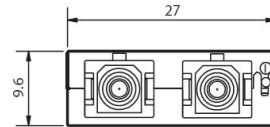
SC-simplex, buffered fiber



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
<b>Connector Body</b>	
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
<b>Duplex clip, black</b>	98 ZD 02-0BK
<b>Crimp sleeve</b>	
for Ø 2.1	98 ZC 05-000
for Ø 2.8-3.5	98 ZC 04-000
<b>Boot, Ø 0.9 mm buffered fiber</b>	
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
<b>Boot, Ø 2.1 mm cable</b>	
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
<b>Boot, Ø 2.8-3.5 mm cable</b>	
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