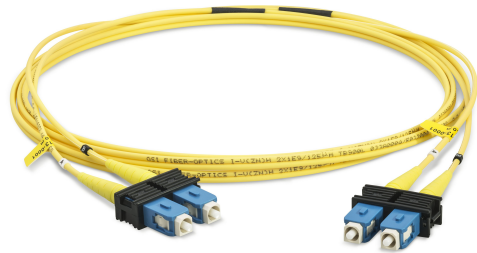


## PRODUCTPROFILE

### Catalogue number: 062A0180G657A1

Partnumber: 750054

Fiber optic duplex patchcord  
Connector side A: SC-Duplex  
Connector side B: SC-Duplex  
9/125µm, Zipcord 2x2.8mm, yellow  
Polarity: crossed A to B  
Cable I-V(ZN)H2x2,8E9/125µm,G657A1



#### **Related documents:**

DS\_FASER G657A1\_OE

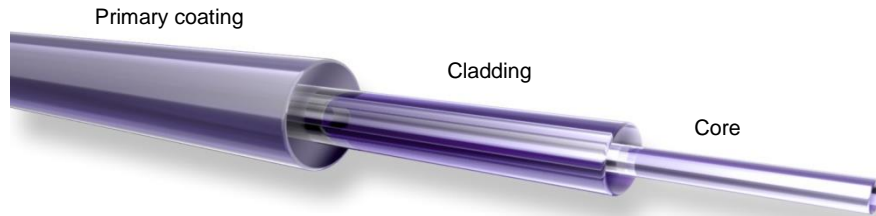
Fiber Data Sheet

DS\_I-VZNH2X28\_900\_L\_OE

Cable Data Sheet

DS\_SC\_STECKER\_OE

Steckerdatenblatt



**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:

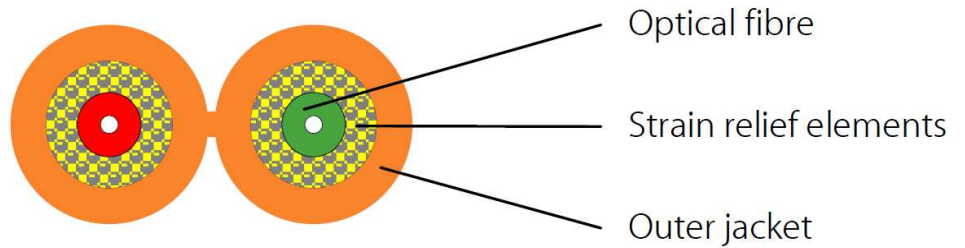
@ 1310 nm -77 dB  
@ 1550 nm -82 dB  
@ 1625 nm -83 dB

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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

Fiber Optic Cable  
I-V(ZN)H 2x 2.8mm... 900µm

033AXXXX



**Standards**

IEC 60794-2

**Structure**

**Cable core:**  
buffered optical fiber, outer diameter 0.9 mm  
colour: red, other core yellow (E9/125), green (G50/125), blue (G62.5/125)  
Strain relief elements (aramid)

**Outer jacket:**  
Halogen-free and flame-retardant material (FRNC)

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

Wall thickness 0.5 mm  
Inkjet marking black acc. to separate drawing

**Geometrical properties**

Number of fibers	Outer diameter [mm]	Weight [kg/km]	Fire load [MJ/m]
2	2.8 x 5.7	15.8	0.36

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Fiber Optic Cable  
I-V(ZN)H 2x 2.8mm... 900µm

033AXXXX

**Mechanical properties**

**Min. bending radius (over the flat side) only for bending resistant fibers**  
 static 15mm  
 dynamic 30mm  
**Min. bending radius (over the flat side) for cables with standard fibers**  
 static 30mm  
 dynamic 60mm  
**Max. pull force** 600 N  
**Max. crush resistance long term** 600 N/dm

**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

**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

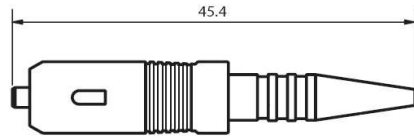
**Deliveryform**

Disposable drums

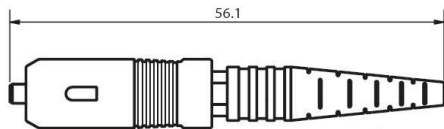
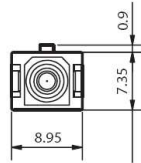
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Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
P. Maier	02.02.2016	H. Jungbäck	02.02.2016	001	without	Y. Zhang	22.06.2017

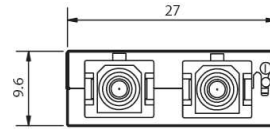
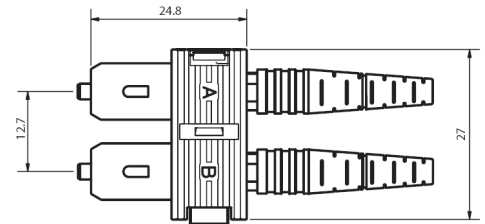
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SC-simplex, buffered fiber



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
<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