

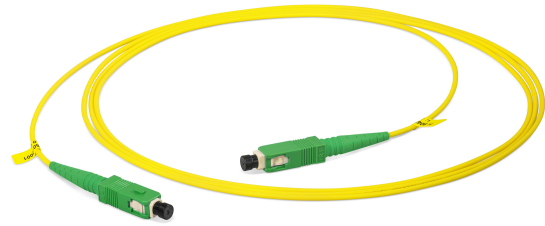
## PRODUCTPROFILE

**Catalogue number: 062A0136**

Partnumber: 745298

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Fiber optic simplex patchcord  
Connector side A: SC-Simplex APC 8 degree  
Connector side B: SC-Simplex APC 8 degree  
9/125µm, 2.0mm, yellow  
Cable I-V(ZN)H1x2,0E9/125µm,G657A1



**Related documents:**

DS\_FASER G657A1\_OE

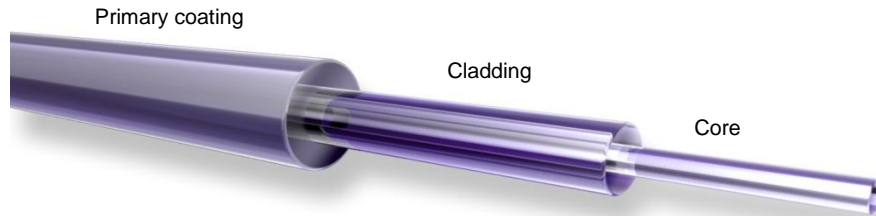
Fiber Data Sheet

DS\_RFC-B001-576\_REV100

Kabeldatenblatt

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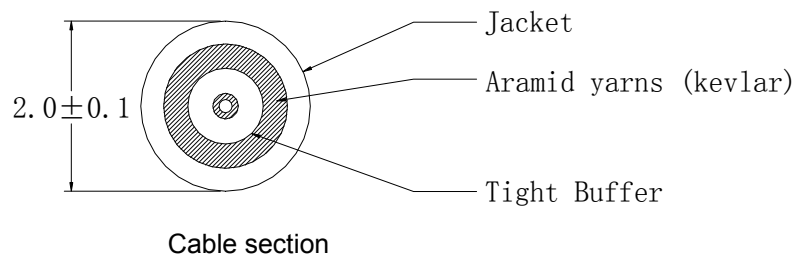
Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
H. Jungbäck	12-04-15	P. Maier	12-04-15	001	without	H. Jungbäck	12-04-15

## Technical Data Sheet

# Rosenberger

FOC,G657A1,Simplex,2.0mm,Yellow,LSZH

RFC-B001-576



Note: All dimensions are in mm;

### Description

Rosenberger 2.0mm cable have good optical、mechanical and environment performance. This full-spectrum fiber has bend performance that exceeds the ITU-TG657.A1 standard and coming SMF-28 Ultra optical fiber is an ITU-TG.G652.D compliant optical fiber with Corning's enhanced low loss and bend fiber technologies.Flame resistant performance follow the IEC standards.

### Available Variants

Type	Fiber Type	Weight (KG/KM)
RFC-B001-576	Corning SMF-28 Ultra	4

Length (m)	Tolerance(m)
L	± 0.1%L

### Parts

<b>Fiber</b>	9/125 μm single mode optical fiber according to G.657A1
<b>Buffer</b>	0.9mm Tight buffer ,LSZH ,Nature
<b>Strength Member</b>	Aramid yarns
<b>Jacket</b>	Min. thickness 0.3mm yellow LSZH jacket

### Optical Data

Cable	
Fiber	9/125um optical fiber according to TIU-T G.657A
Fiber count	1 fiber
Cable Attenuation	≤0.4dB/km @ 1310nm ≤0.3dB/km @ 1550nm

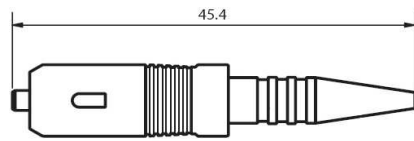
### Cable Construction

Cable	
Out jacket diameter,	2.0±0.1mm
Out jacket color	Yellow
Strength member	Aramid yarns
Tight buffer	0.9±0.05mm

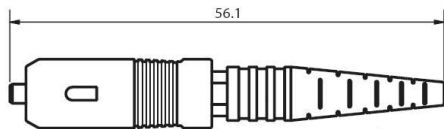
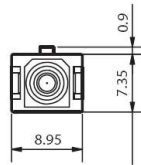
### Mechanical Data

Cable	
Minimum bending radius	Dynamic: 30mm

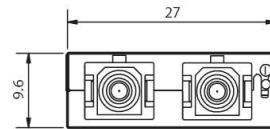
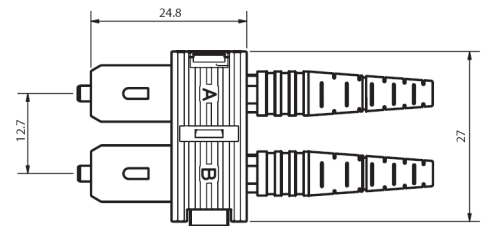
<b>Technical Data Sheet</b>					<b>Rosenberger</b>					
FOC,G657A1,Simplex,2.0mm,Yellow,LSZH					<b>RFC-B001-576</b>					
Tensile Strength (according to IEC 60794-1-2 E1)  Crush (According to IEC 60794-1-2 E3)					Static:15mm Long term tensile force: 60N, Short term tensile force:100N, Long term Crush force: 100N/100mm, Short term Crush force: 300N/100mm					
<b>Environmental Data</b>										
<b>Temperature range operation</b>					-20 °C to +80 °C					
<b>Temperature range storage</b>					-20 °C to +80 °C					
<b>Temperature range installation</b>					-0 °C to +55 °C					
<b>2002/95/EC (RoHS)</b>					Compliant					
<b>Packing</b>										
<b>Standard</b>					1km on wooden drum					
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Draft	Date	Check	Approve	Date	Rev.	ECN	Name	Date		
Sean	2016-06-16	Joy	Lihai	2016-06-16	B00	16-109	Sean	2016-06-16		
Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O. Box 1260 D-84526 Tittmoning Germany Tel. , +49 8684 18-0 Fax. , +49 8684 18-499 Email , info@rosenberger.de Web , www.rosenbergerap.com					Rosenberger (Shanghai) Technology Co., Ltd. B2, No.303, Xin Ke Road, Shanghai, China 201707 Tel, +86 - 21 - 6921 3699 Fax, +86 - 21- 6921 2923 Email , info@rosenbergerap.com Web , www.rosenbergerap.com					Page  2 / 2



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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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