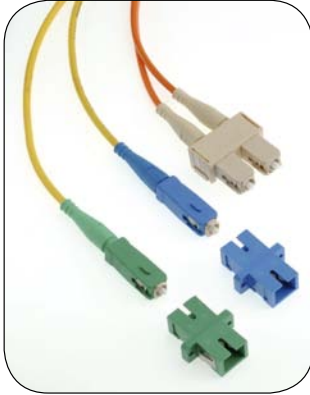


SC Series

F728

RADIALL 
The next conneXion

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The SC connector is a fiber optic connector with a push-pull latching mechanism which provides quick insertion and removal, while ensuring a robust connection, thanks to its “pull-proof” concept.

The SC connector is frequently used in datacom or telecom applications, especially for FTTH applications.

The SC connector range is available in PC and APC polishing. A duplex configuration is also available by using a fully removable duplex brace. The identification of the optical channel (A or B) can be easily changed by reversing the clip cover.

The RADIALL SC connector has something more than the competitors: it can be tuned to 1 of 6 positions to optimise the insertion loss for random connections (the tuning technique consists of rotating the optical ferrule to reduce the offset between fiber cores, IEC 61300-2-41)

BENEFITS & FEATURES

• Easy mounting and installation

- Radiall has a proprietary secure bonding to protect the floating mechanism during the resin injection process
- APC 8° pre-angled version is available to accelerate installation on the field
- Latched push-pull system for quick insertion and removal
- Color coding

• High performance

- High precision alignment with proven 2.5 mm zirconia ferrule
- Tested according to GR-326-CORE Telcordia and IEC 60874 specifications
- One-piece tuneable connector® to optimise fiber's cores alignment when connecting (6 positions)

• Secure Connexion

- Pull-proof design
- Radiall has improved the crimping reliability thanks to a mini metallic tube protecting the fiber while reducing stress and ensuring excellent cable retention
- Different protection boots available with exclusive shapes to tighten the cable and maintain optical performances even when the cable is bent or pulled

• Flexible

- Available for MultiMode, single mode, PC, UPC and APC terminations
- Can be assembled in duplex configuration with a removable clip

APPLICATIONS

- Telecommunication networks (FTTA, Ethernet, Sonet/ATM, fiber channel, FTTH)
- Broadband subscriber networks
- CATV
- Fiber management systems
- Active device termination
- Datacom LAN



OPTICAL CHARACTERISTICS

	SingleMode PC	SingleMode PC «tuned»	SingleMode APC	SingleMode APC «tuned»	MultiMode PC
Wave length	1310-1550 nm				850-1310 nm
Insertion Loss (against a reference patchcord)					
Mean	< 0.20 dB	< 0.20 dB	< 0.20 dB	< 0.20 dB	< 0.20 dB
Standard deviation	0.14 dB	0.14 dB	0.15 dB	0.15 dB	0.08 dB
Insertion Loss (Random)					
Peak	< 0.8 dB, 97%	< 0.6 dB, 99%	< 0.8 dB, 97%	< 0.6 dB, 99%	-
Average	0.25 dB	0.13 dB	0.25 dB	0.15 dB	-
Return Loss	PC > 30 dB UPC > 50 dB		APC > 60 dB		PC > 20 dB

Insertion Loss Against a reference patchcord: IEC 61300-3-4 Method B

Insertion Loss Random: IEC 61300-3-34

Return Loss: IEC 61300-3-6

Note: The optical performances also depend on the fiber and/or cable construction.

MECHANICAL CHARACTERISTICS

	Cable diameter 0.9 mm	Cable diameter 2 & 3 mm
Cable retention	7N	100N
Mechanical endurance	500 matings	

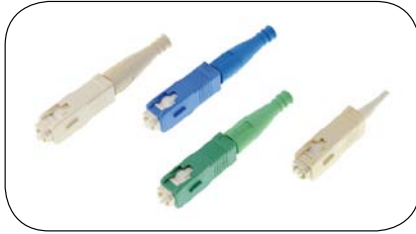
ENVIRONMENTAL CHARACTERISTICS

Operating temperature	-40°C / + 85°C
Storage temperature	-40°C / +85°C

INTERNATIONAL STANDARD DOCUMENTS COMPLIANCE

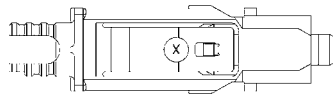
- GR-326-CORE Telcordia specification
- IEC 61754-4 Fiber optic connector interfaces (SC connector family)
- IEC 61300 Fiber optic interconnecting devices and passive components - Basic test and measurement procedures

SIMPLEX SC CONNECTORS



The simplex connectors are delivered with straight boots, dust caps and crimping accessories, except for the level "0" categories which enable users to configure their connectors according to the application.

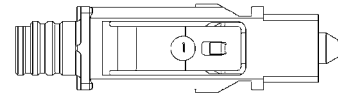
Polishing PC



27 max.

Fig. 1

Polishing APC



27 max.

Fig. 2

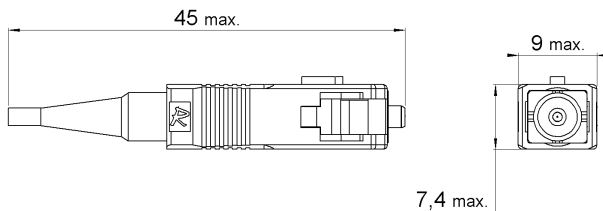


Fig. 3

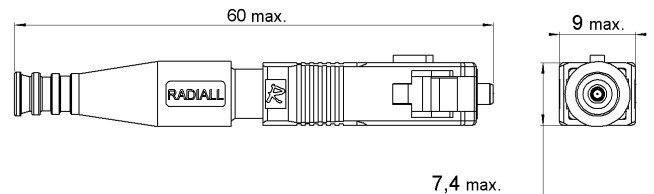


Fig. 4

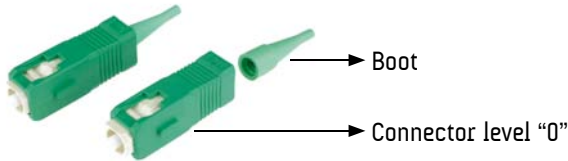
Cable diameter	Figure	SingleMode PC 126µm - Blue	SingleMode APC 126µm - Green	MultiMode PC 126µm - Beige	MultiMode PC 128µm - Aqua	Packaging
Level «0» ⁽¹⁾	Fig 1 & Fig 2	F728 102 000	F728 112 000	F728 103 000	-	100
0.9 mm	Fig 3	F728 002 100	F728 012 100	F728 003 100	-	1
		F728 102 100	F728 112 100	F728 103 100	F728 103 101	100
2 mm	Fig 4	F728 002 500	F728 012 500	F728 003 500	-	1
		F728 102 500	F728 112 500	F728 103 500	F728 103 501	100
3 mm	Fig 4	F728 002 700	F728 012 700	F728 003 700	-	1
		F728 102 700	F728 112 700	F728 103 700	F728 103 702	100

⁽¹⁾ The level "0" is supplied without boots or crimp sleeves. To complete your connector assembly kit, please refer to the "accessories" section.

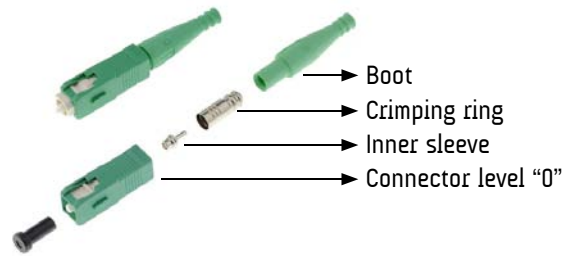
For other cable diameters, please consult the Radiall sales team.

Flexible configuration of simplex connector using level 0 part numbers

For 0.9 mm cable diameter



For 2 or 3 mm cable diameter



To get more information on how to find the corresponding part numbers and connector kit combination, please refer to the SC kit configurator section.

APC 8° PRE-ANGLED SIMPLEX CONNECTORS



The APC version of the SC connector is also proposed in a pre-angled end face version for a quick polishing in the field and ultra-low back reflexion.

Cable diameter	Figure	SingleMode APC Pre-angled 125µm - Green	Packaging
0.9 mm		F728 132 100	100
3 mm		F728 132 700	100

DUPLEX SC CONNECTORS

Thanks to Radiall's SC removable duplex clip, a simplex connector can be changed at any time to a duplex connector. The clip is fitted after cabling.

Select 2 Simplex SC connectors and a duplex removable clip to create your duplex SC connector.

The identification of the optical channel (A or B) can be easily changed by reversing the clip cover.



To select a clip, please refer to the "accessories" section.

ADAPTERS

The SC adapters are available for snap-in or flange screw-in mounting.

Color coding remains the same as the connector coding:

- SingleMode PC: *Blue*
- SingleMode APC: *Green*
- MultiMode PC: *Beige*
- MultiMode Pc with OM3 fiber: *Aqua*

SIMPLEX ADAPTERS

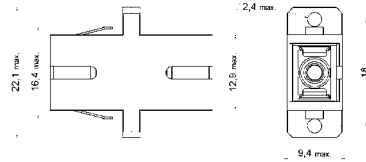
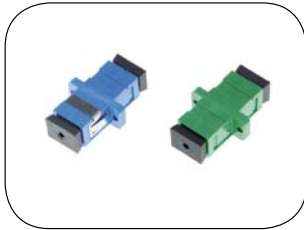


Fig. 1

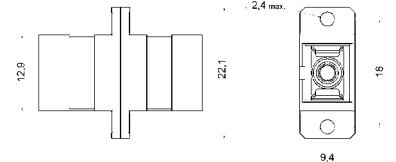
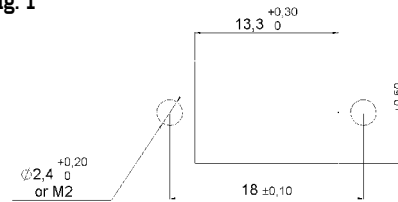


Fig. 2



Panel piercing

Figure	PC SingleMode <i>Blue</i>	APC SingleMode <i>Green</i>	MultiMode <i>Beige</i>	MultiMode <i>Aqua</i>	Alignment sleeve	Adapter type	Packaging
Fig 1	F728 703 000	F728 703 100	F728 703 700	-	Zirconia ceramic	Snap in	1
	F728 713 000	F728 713 100	F728 713 700	F728 713 701			100
Fig 2	F728 700 000	F728 700 100	F728 700 700	-	Zirconia ceramic	Screw in	1
	F728 710 000	F728 710 100	F728 710 700	-			100

DUPLEX ADAPTERS

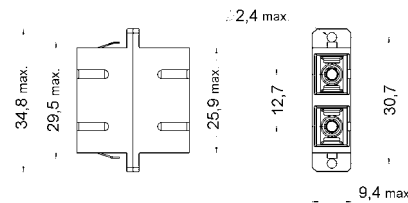


Fig. 1

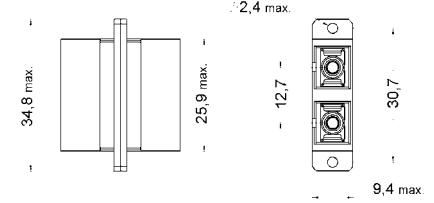
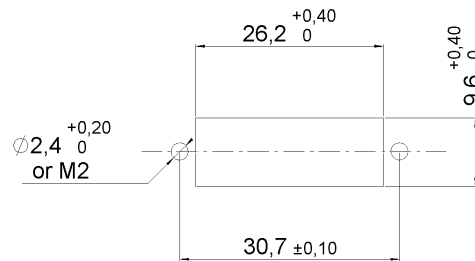


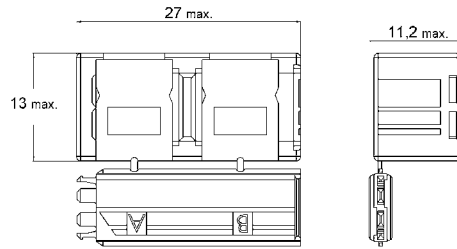
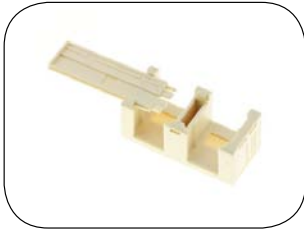
Fig. 2



Panel piercing

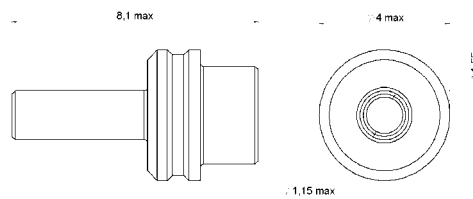
Figure	PC SingleMode <i>Blue</i>	APC SingleMode <i>Green</i>	PC MultiMode <i>Beige</i>	MultiMode <i>Aqua</i>	Alignment sleeve	Adapter type	Packaging
Fig 1	F728 743 000	F728 743 100	F728 743 700	-	Zirconia ceramic	Snap in	1
	F728 753 000	F728 753 100	F728 753 700	F728 753 701			100
Fig 2	-	F728 750 100	F728 750 700	-	Zirconia ceramic	Screw in	100

DUPLEX REMOVABLE CLIPS



Fiber type	Color	Part number	Packaging
MultiMode	Beige	F718 100 000	100
Single mode PC	Blue	F718 101 000	
Single mode APC	Green	F718 102 000	

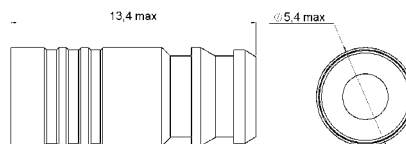
INNER SLEEVES



Cable dia.	Part number	Packaging
1.6 mm to 3 mm	F718 106 200 ⁽¹⁾	100

⁽¹⁾ This reference applies to SC and FC connectors

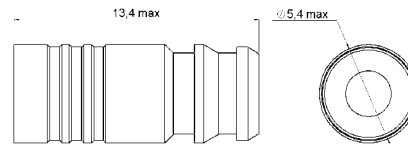
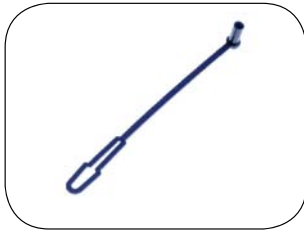
CRIMPING RINGS



Cable dia.	Part number	Packaging
2 mm	F718 109 200 ⁽¹⁾	100
2.4 mm	F718 108 200 ⁽¹⁾	
2.7/3 mm	F718 107 200 ⁽¹⁾	

⁽¹⁾ These references apply to SC and FC connectors

CONNECTOR CAPS



Series	Part number	Description	Packaging
For all 2.5 mm optical ferrule	F718 111 220⁽¹⁾	Universal, plastic dust cap	20

⁽¹⁾ This reference applies to SC, ST and FC connectors

BOOTS

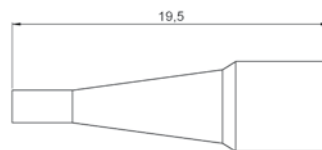
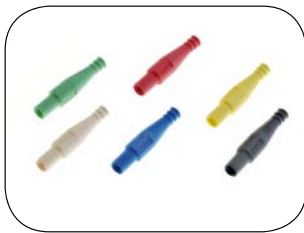


Fig. 1

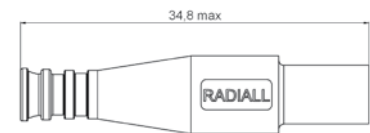


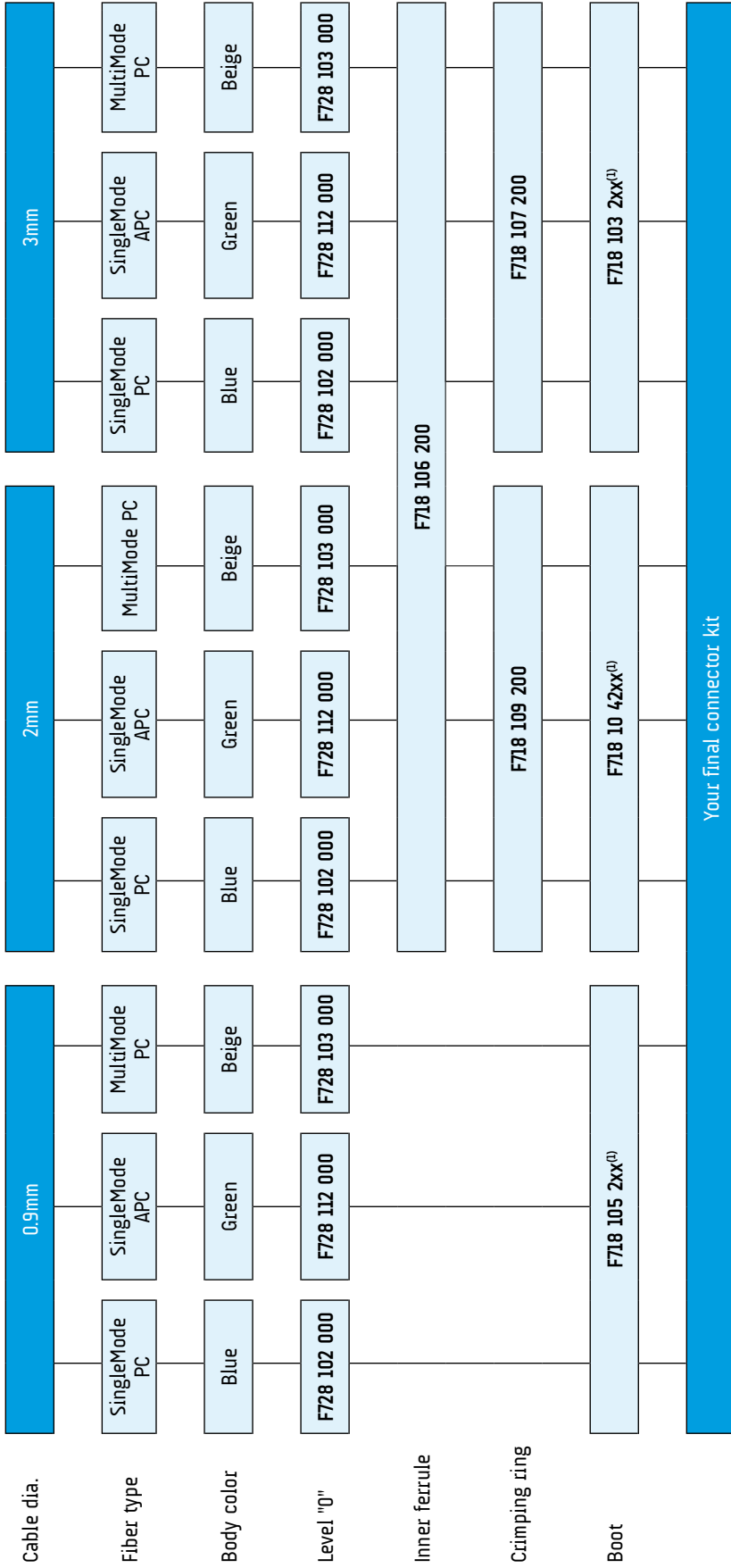
Fig. 2

Color	Cable diameter			Packaging
	0.9 ⁽¹⁾ mm Fig 1	2 to 2.4 ⁽²⁾ mm Fig 2	2.7 to 3 ⁽²⁾ mm Fig 2	
Black	F718 105 200	F718 104 200	F718 103 200	100
Blue	F718 105 201	F718 104 201	F718 103 201	
Yellow	F718 105 202	F718 104 202	F718 103 202	
Red	F718 105 203	F718 104 203	F718 103 203	
Green	F718 105 205	F718 104 205	F718 103 205	
Beige	F718 105 206	F718 104 206	F718 103 206	
Aqua	F718 105 210	F718 104 210	F718 103 210	

⁽¹⁾ These references apply to SC and FC connectors

⁽²⁾ These references apply to SC, FC and ST connectors

You can refer to this table and complete your connector by combining different accessories with level "0".



⁽¹⁾ Replace x by the following digit for your color reference: 00: black; 01: blue; 02: yellow; 03: red; 05: green; 06: beige; 10: aqua



AEROSPACE



AUTOMOTIVE



DEFENSE



INDUSTRIAL



INSTRUMENTATION



MEDICAL



SPACE



TELECOM

EUROPE

France - RADIALL S.A.

101, Rue Ph. Hoffmann
93116 ROSNY sous BOIS (Paris)
Tel.: +33 1 49 35 35 35 - Fax: +33 1 48 54 63 63
E-Mail: info@radiall.com

Finland - RADIALL SF

P.O. Box 202 - 90101 OULU
Tel.: +358 407 522 412
E-Mail: infofi@radiall.com

Germany - RADIALL GmbH

Carl-Zeiss Str. 10 Postfach 200143
D63307 - RÖDERMARK (Frankfurt)
Tel.: +49 60 74 91 07 0 - Fax: +49 60 74 91 07 70
E-Mail: infode@radiall.com

Italy - RADIALL Elettronica S.R.L.

Via Concordia, 5 - 20090 ASSAGO MILANO
Tel.: +39 02 48 85 121 - Fax: +39 02 48 84 30 18
E-Mail: infoit@radiall.com
Regional office: Roma

Netherlands - RADIALL B.V.

Hogebrikerweg 15b - 3871 KM HOEVELAKEN
Tel.: +31 33 253 40 09 - Fax: +31 33 253 45 12
E-Mail: infonl@radiall.com

Sweden - RADIALL A.B.

Sjöängsvägen 2 - SE-192 72 SOLLENTUNA (Stockholm)
Tel.: +46 844 434 10 - Fax: +46 875 449 16
E-Mail: infose@radiall.com

U.K. - RADIALL Ltd.

Ground Floor, 6 The Grand Union Office Park,
Packet Boat Lane
UXBRIDGE Middlesex UB8 2GH (London)
Tel.: +44 1895 425 000 - Fax: +44 1895 425 010
E-Mail: infouk@radiall.com

NORTH AMERICA

USA - RADIALL USA, Inc.

6825 West Galveston Street
CHANDLER, Arizona 85226
Tel.: +1 480 682 9400 - Fax: +1 480 682 9403
E-Mail: infousa@radiall.com

ALSO REPRESENTED IN

Australia	Hungary	Poland
Austria	Indonesia	Russia
Belgium	Israel	Singapore
Brazil	Korea	Spain
Czech Republic	Latvia	Switzerland
Denmark	Lithuania	Taiwan
Estonia	Malaysia	Thailand
Greece	Norway	Vietnam
	Philippines	South Africa

For the above countries, please contact the local agent or RADIALL at info@radiall.com

ASIA

China - SHANGHAI RADIALL Electronic Co., Ltd.

N° 390 Yong He Road 200072 - SHANGHAI
Tel.: +86 21 66 52 37 88 - Fax: +86 21 66 52 11 77
E-Mail: infosh@radiall.com

Japan - NIHON RADIALL

Shibuya-ku Ebisu 1-5-2, Kougetsu Bldg 405
TOKYO 150-0013
Tel.: +81 3 3440 6241 - Fax: +81 3 3440 6242
E-Mail: infojp@radiall.com

Hong Kong - RADIALL Electronics Ltd.

Flat D, 6/F, Ford Glory Plaza,
37-39 Wing Hong Street
Cheung Sha Wan
KOWLOON HONG KONG
Tel.: +852-2959-3833 - Fax: +852-2959-2636
E-Mail: infohk@radiall.com

India - RADIALL India Pvt. Ltd.

25 D, II Phase, Peenya Industrial Area
BANGALORE 560058
Tel.: +91 80 83 95 271 - Fax: +91 80 83 97 228
E-Mail: infoin@radiall.com

