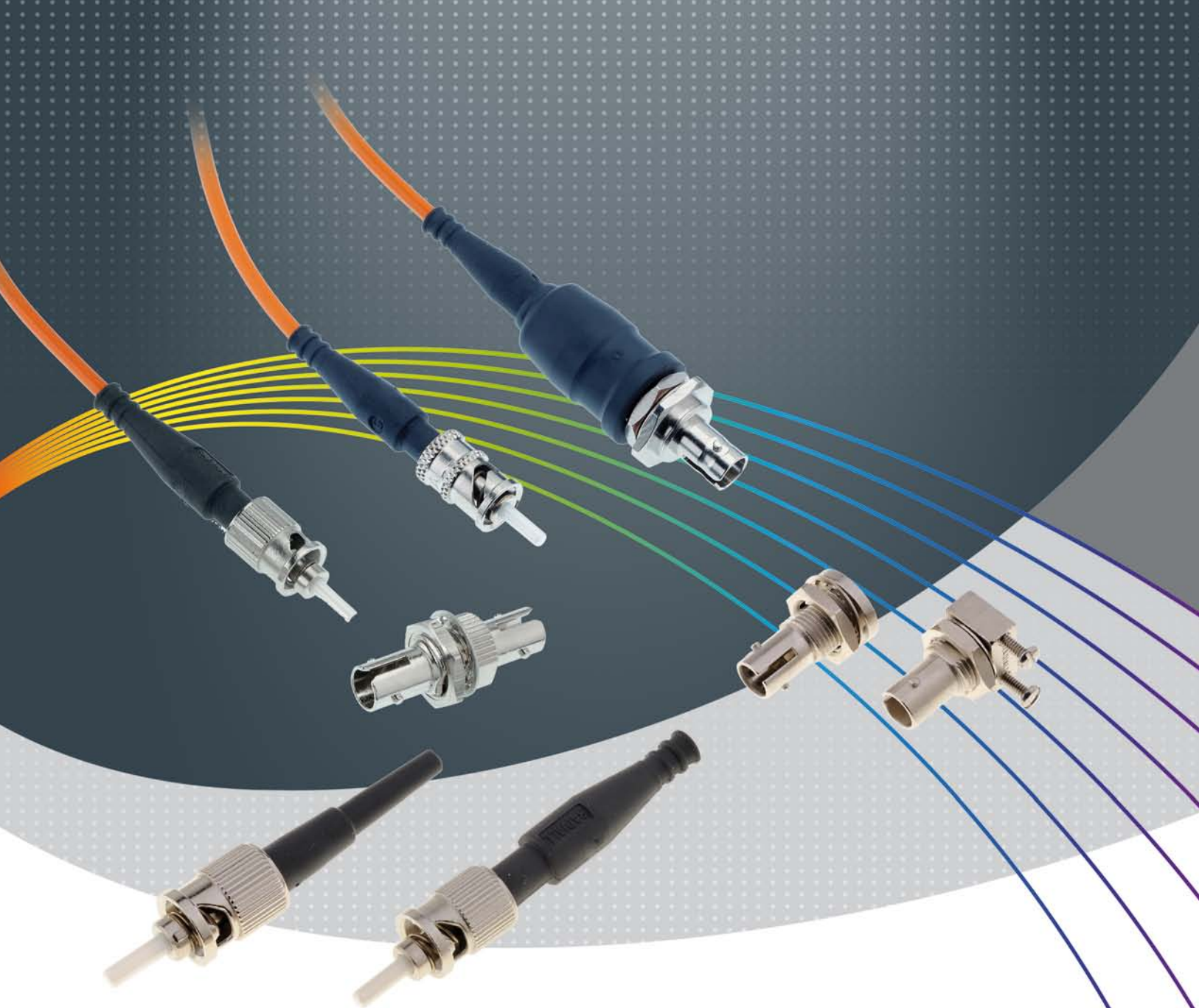




ST Series

F709

RADIAL 
The next conneXion

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The ST connector is a fiber optic connector using a bayonet locking system making the installation quick and easy. It is made of a nickel plated housing and 2.5 mm ceramic ferrule.

The spring loaded mechanism provides a tight connexion with precise alignment between contact points.

High optical performances are maintained thanks to the ST's key which prevents rotation of the ceramic ferrule.

The ST series is produced according to the IEC 60874-10 standard and is available in MultiMode and SingleMode version.

BENEFITS & FEATURES

- **Easy and fast installation**
 - Bayonet locking system
 - Pre-radius (20mm) zirconia ceramic ferrule
- **Secure Connexion**
 - Standard or secure crimping (double ferrule)
 - Bayonet locking system
 - Available in a totally sealed version for use in harsh environment (IP64)
- **High performance**
 - Using Physical Contact technology
 - Tested according to GR-326-CORE Telcordia and IEC 60874 specifications
- **Flexible**
 - All cable diameters covered from 0.9 to 3 mm
 - Available for SingleMode fibers and different sizes of MultiMode fibers

APPLICATIONS

- Telecommunication
- Data processing network
- Fiber management system
- Instrumentation
- Medical



OPTICAL CHARACTERISTICS

	SingleMode PC	MultiMode PC
Wave length	1310-1550 nm	850 nm
Insertion loss (against a reference patchcord)		
Mean	< 0.25 dB	< 0.25 dB
Standard deviation	0.11 dB	0.11 dB
Return loss	PC > 30 dB UPC > 50 dB	PC > 20 dB

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

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
Jacket retention for secure crimping version	-	10N
Mechanical endurance	500 matings	

ENVIRONMENTAL CHARACTERISTICS

Operating temperature	-40°C / +70°C
Storage temperature	-40°C / +85°C

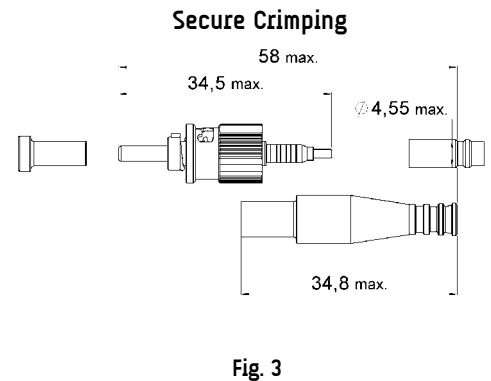
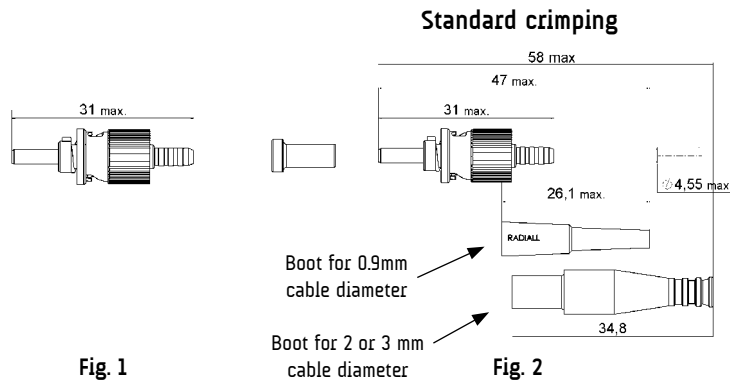
INTERNATIONAL STANDARD DOCUMENTS COMPLIANCE

- GR-326-CORE Telcordia specification
- IEC 61754-2 Fiber optic connector interfaces
- IEC 61300 Fiber optic interconnecting devices and passive components - Basic test and measurement procedures



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

The series proposes a version with the secure crimping concept. This concept enables a simultaneous holding of the aramid strength members and the outer jacket of the fiber. The fiber is well protected against the crimping stress.



Cable diameter	Figure	Standard crimping				Secure crimping		Packaging
		SingleMode PC 126µm	MultiMode PC 128µm	MultiMode PC 140µm	MultiMode PC 230µm	SingleMode PC 126µm	MultiMode PC 128µm	
Level «0» ⁽¹⁾	Fig 1	F709 036 200	F709 025 200	-	-	-	-	100
0.9 mm	Fig 2 and Fig 3	F709 034 706 ⁽²⁾	F709 022 000	F709 090 000 ⁽²⁾	-	-	-	1
		F709 034 200 ⁽²⁾	F709 022 200	-	-	-	-	100
-		-	-	-	-	F709 097 200	100	
3 mm		F709 034 706 ⁽²⁾	F709 024 000 ⁽²⁾	F709 090 000 ⁽²⁾	F709 038 000	-	-	1
		F709 034 200 ⁽²⁾	F709 024 200 ⁽²⁾	-	-	F709 096 200	F709 098 200	100

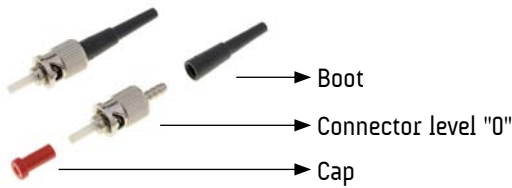
⁽¹⁾ The level "0" is supplied without boots or crimp sleeves. To complete your connector assembly kit, please refer to the "accessories" section.

⁽²⁾ 2 Boots are delivered with this PN

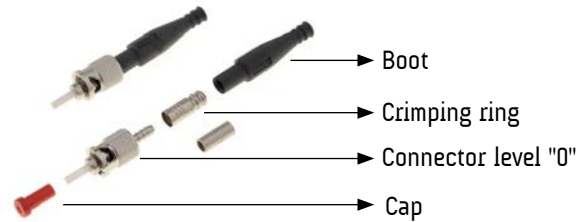
For other cable diameters, please consult the Radiall sales team.

Flexible configuration using level "0" part numbers:

For 0.9 mm cable diameter



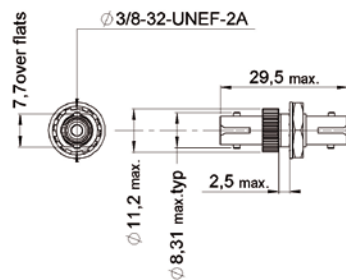
For 2 or 3 mm cable diameter



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

ADAPTERS

The ST adapter features a bayonet coupling system to secure the connexion with the ST connectors. The alignment sleeve is available in zirconia ceramic or phosphore bronze and works for single or MultiMode fibers.



Part number	Alignment sleeve	Panel piercing	Packaging
F709 730 000	Zirconia ceramic		1
F709 730 200			100
F709 722 000	Phosphor bronze		1
F709 722 200			100

RECEPTACLES

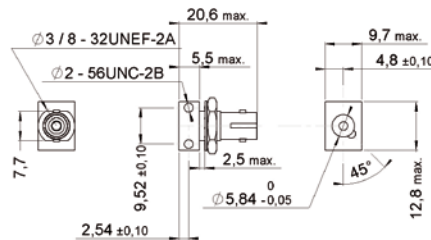


Fig. 1

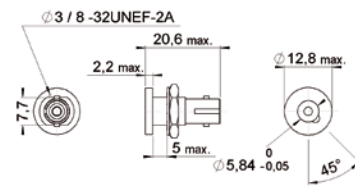


Fig. 2

Part number	Figure	Description	Note	Panel piercing	Packaging
F709 400 000	Fig 1	Bulkhead or PCB mounting	Metal body, supplied with 2 centering rings		1
F709 401 000	Fig 2	Bulkhead mounting			1

ST SEALED CONNEXION FOR OUTSIDE APPLICATION



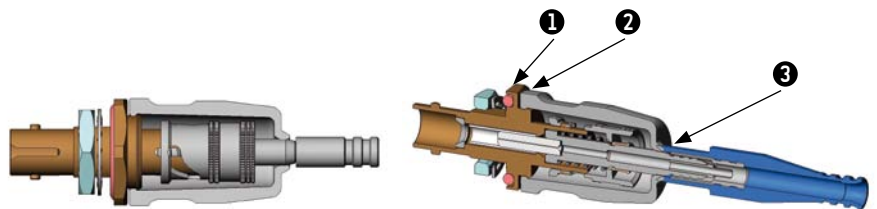
Radiall also offers a specific configuration of the ST connector that keeps the connexion robust when working in harsh environment. By combining the sealed connector and adapter, you'll get a full sealed IP64 connexion for operation in all weather condition (rain, snow... except immersion).

BENEFITS & FEATURES

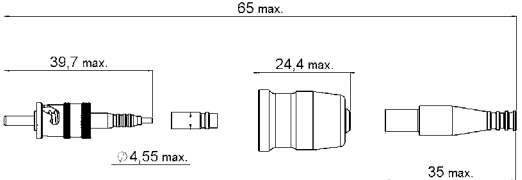
- Effective protection in hash environment
- Bayonet locking system
- Pre-radius MultiMode zirconia ceramic ferrule
- Secure crimping
- Outside boot providing the sealing of the complete connexion

By adding an internal gasket on the bulkhead adapter and an outside boot, the sealing is guaranteed on 3 points of the connexion:

1. Panel / adapter
2. Connector / adapter
3. Connector / cable

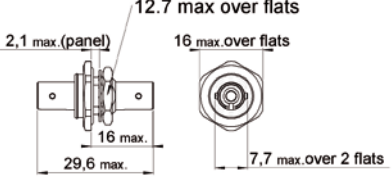


ST SEALED CONNECTORS

	Figure	MultiMode PC 128µm	Cable dia.	Packaging
		F709 089 000	2.7 to 3 mm	1

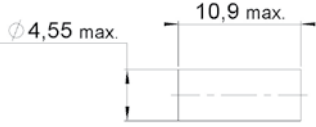
ST SEALED ADAPTER

The sealed adapter has been designed to be used with the sealed connector F709 089 000 to guaranty a totally sealed connexion.

	Figure	Part number	Alignment sleeve	Packaging
		F709 724 000	Phosphor bronze	1

Note: the sealed connector and adapter cannot be combined with non-sealed version.

CRIMPING RINGS

	Figure	Part number	Cable dia.	Packaging
		F718 069 000	2 mm to 3 mm	100

CONNECTOR CAPS



Fig. 1



Fig. 2



Fig. 3



Fig. 4

Part number	Figure	Series	Description	Packaging
F709 760 000	Fig 1	ST adapters and receptacles	Metal protective cap	1
F718 044 000	Fig 2	ST and FC connectors	Safety plastic cap	20
F709 750 000	Fig 3	ST connectors	Metal dust cap	20
F718 111 220	Fig 4	ST, SC and FC connectors and all connectors with 2.5 mm optical ferrule	Universal, plastic dust cap	20

BOOTS

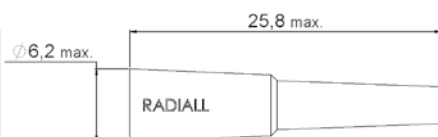


Fig. 1

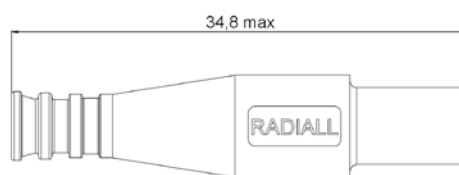


Fig. 2

Color	Cable diameter			Packaging
	0.9 mm Fig.1	2 to 2.4 ⁽¹⁾ mm Fig.2	2.7 to 3 ⁽¹⁾ mm Fig.2	
Black	F718 064 000	F718 104 200	F718 103 200	100
Blue	-	F718 104 201	F718 103 201	
Yellow	-	F718 104 202	F718 103 202	
Red	-	F718 104 203	F718 103 203	
Green	-	F718 104 205	F718 103 205	
Beige	-	F718 104 206	F718 103 206	
Aqua	-	F718 104 210	F718 103 210	

⁽¹⁾ These references apply to SC, FC and ST connectors

ST KIT CONFIGURATOR

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

Cable dia.	0.9 mm		2 mm		3 mm	
Fiber type	SingleMode PC (126µm)	MultiMode PC (128µm)	SingleMode PC (126µm)	MultiMode PC (128µm)	SingleMode PC (126µm)	MultiMode PC (128µm)
Level «0»	F709 036 200	F709 025 200	F709 036 200	F709 025 200	F709 036 200	F709 025 200
Crimping ring	F718 069 000					
Boot	Black : F718 064 000		F718 104 2xx ⁽¹⁾		F718 103 2xx ⁽¹⁾	
Your final connector kit						

⁽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



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INSTRUMENTATION



MEDICAL



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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.

Hogebrinkerweg 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
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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: infozh@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

