

EC Series

F715

RADIALL 
The next conneXion

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Radiall's proprietary EC product range is a revolutionary solution providing very high performances and easy to use connectors.

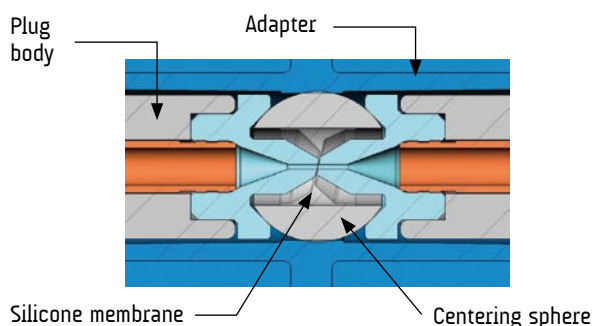
Combining the advantages of angled, polished fibers and membrane usage (providing a non-physical contact), the EC connector has a very low reflection rate and is able to accommodate up to 1000 cycles.

Its ergonomic housing with the push-pull system facilitates the mounting even on very dense applications.

Its unique technology makes it ideal for very high speed and long distance connections.

TECHNOLOGY of the Cone/Sphere alignment for an efficient and simple connection:

Fibers are mechanically aligned and the surface contact are immersed in a silicone membrane when connected, ensuring no physical contact and very high number of cycles.



The conical shape of the top surface of the EC connector acts as a mechanical reference for the sphere situated inside the connection. Once clicked into the adapter, the plugs position themselves on the sphere and allow the two fibers to be aligned.

BENEFITS & FEATURES

- **Easy to use and to implement**
 - Click and Push-pull design: the EC connector is simply clicked into place to facilitate the mounting
 - The "push-pull system" makes it easy to remove even in difficult to access environments
 - The rectangular shape allows the connector to be placed side by side and provide higher density
 - No convex polishing is required to fasten the mounting
- **High performances**
 - The very low reflection rate is ensured by the optical faces and the membrane being inclined at 12°
 - The silicone membrane ensures optical continuity between fibers' surfaces, making the estimated losses identical at 1310 and 1550 nm
- **High mechanical endurance**
 - Thanks to the silicone membrane, placed inside the sphere, the fibers are not physically in contact. This advanced technology improves the mechanical endurance and allows the connector to work up to 1000 cycles
- **Safe and reliable**
 - A metal floating ferrule provides high robustness and maintains connectivity independently on the traction on the cable

APPLICATIONS

- High speed, long distance transmission
- Subscriber networks, distribution
- Instrumentation
- Medical

OPTICAL CHARACTERISTICS

	SingleMode		Multimode	
	Random	Against a reference patchcord	Random	Against a reference patchcord
Wave length	1300/1550 nm		850 nm	
Insertion loss Mean Standard deviation	0.4 dB	0.25 dB	0.3 dB	0.15 dB
	0.18 dB	0.10 dB	0.12 dB	0.09 dB
Return loss	> 60 dB		> 50 dB	

Insertion Loss Random: IEC 61300-3-34

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

Return loss: IEC 61300-3-6 (Maximum loss variation)

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	1000 matings	

ENVIRONMENTAL CHARACTERISTICS

Operating temperature	- 25°C / +70°C
Storage temperature	-40°C / +85°C
Salt spray	96 hours

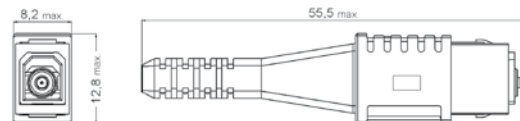
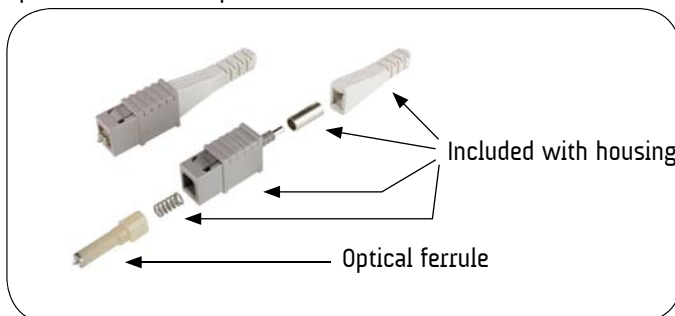
INTERNATIONAL STANDARD DOCUMENTS COMPLIANCE

- IEC 61300 Fiber optic interconnecting devices and passive components - Basic test and measurement procedures.

EC CONNECTORS

EC CONNECTORS FOR SINGLEMODE FIBERS

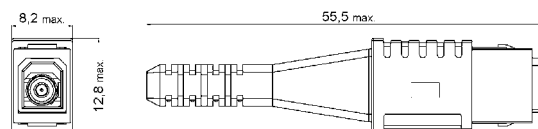
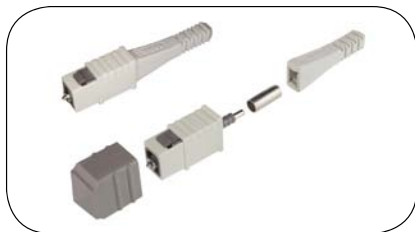
For greater flexibility and optimized performances, EC plug housings need to be associated with the corresponding optical ferrule. The optical ferrules are available in different sizes and need to be ordered separately.



	Cable diameter 0.9 mm, 2 mm, 3 mm		
	SM fibre diameter	Part number	Packaging
Housing		F715 050 000	1
Optical ferrule To be ordered separately	125µm (+1/+0.5)	F715 001 703	10
	126µm (+1/0)	F715 001 706	10

EC CONNECTORS FOR MULTIMODE FIBERS

EC MultiMode connectors are delivered equipped with an optical ferrule



Cable diameter 0.9 mm, 2 mm, 3 mm		
MM fiber diameter	Part number	Packaging
128µm	F715 100 000	1
140µm	F715 102 000	100

Note: EC connectors are also available for connecting HSC 200, 400 and 600 µm multimode fibers. Please consult the Radiall sales team for more information.

ADAPTERS

EC adapters are equipped with a silicone membrane. They can be fixed by clipping or screwing.

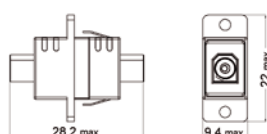


Fig. 1

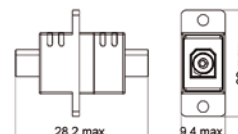
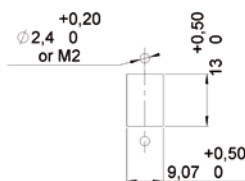


Fig. 2



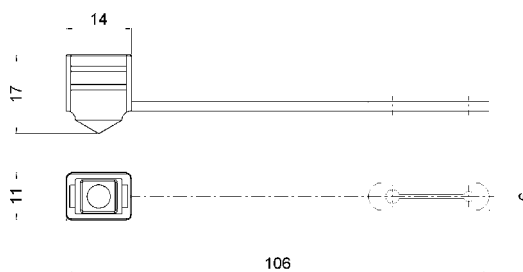
Panel Piercing

Part number	Figure	Description	Packaging
F715 700 000	Fig 1	Adapter with mounting holes and panel clip	1
F715 704 000	Fig 2	Adapter with mounting holes	

Note: The adapters can be used either with multimode or SingleMode connectors.

ACCESSORIES

CONNECTOR CAPS



Part number	Description	Packaging
F715 750 000	Safety caps (grey) for plugs	20



AEROSPACE



AUTOMOTIVE



DEFENSE



INDUSTRIAL



INSTRUMENTATION



MEDICAL



SPACE



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