

DIAMOND

Fiber Optic Components

FC Standard & Mini

SINGLE MODE PC/APC
MULTIMODE PC

CABLE ASSEMBLIES AND ADAPTERS

DESCRIPTION

Diamond FC connectors are available in SM PC/APC and MM PC as well as for the following technologies: PM, PZ, VIS/NIR, Low wavelengths, fusion and high temperature.

These connectors are manufactured with our patented two-part ferrule and "Active Core Alignment" (ACA) technology aiming to reduce the insertion loss values by minimizing fiber-to-fiber eccentricity.

Diamond FC connectors are available as terminated connectors, Splice On Connectors (SOC) and connector set to be terminated with Diamond special equipment.

SPECIFICATIONS FOR STANDARD VERSION

	MULTIMODE 0° PC	SINGLE MODE 0° PC	SINGLE MODE 8° APC	UNITS	TEST CONDITIONS
Insertion Loss (IL)	typ. 0.15 max. 0.4	typ. 0.2 max. 0.4	typ. 0.2 max. 0.4	dB	IEC 61300-3-4; $\lambda = 1300/1550\text{nm}$
Return Loss (RL)	min. 40	50	min. 70*	dB	IEC 61300-3-6; $\lambda = 1300/1550\text{nm}$
Repeatability of IL	max ± 0.1			dB	IEC 61300-2-2; $\lambda = 1300/1550\text{nm}$
Service life	1000 mate/demate cycle			-	According to field experience
Operating temperature	-40/+85**			°C	
Storage temperature	-40/+90**			°C	

* Measured with high precision reflectometer

** May be further limited by cable specifications

APPLICATIONS

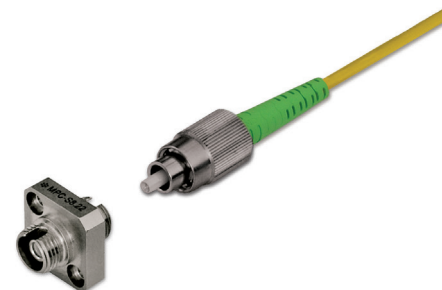
- ▶ Telecommunications, CATV, LAN, MAN, WAN, Test & Measurement, Industry, Medical

STANDARDS

- ▶ IEC 61 754-13 "Fiber optic interfaces - Type FC-PC connector family"
- ▶ CECC 86 115-801 "Detail specification-connector set of assessed quality for optical fibers and cables - Style FC"

AVAILABLE AS

- ▶ Terminated connector
- ▶ Connector set, (to be terminated with Diamond special equipment)
- ▶ Splice On Connectors to be terminated with DIAMOND ZEUS D50 Fusion field termination kit. For more information please refer to the part-specific ZEUS D50 Fusion Field Termination Kit datasheet.



FC Standard



FC Mini



FC Splice On Connector (SOC)



ZEUS D50 Fusion splicer



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Specifications subject to change
without notice

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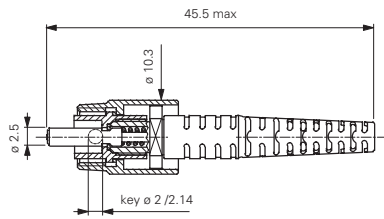
DRAWINGS AND DIMENSIONS

FC STANDARD & MINI CONNECTORS

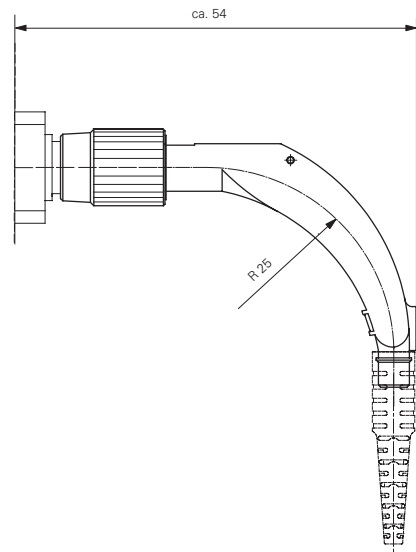
FC Standard connectors 900 μm - 3 mm boot style

Available types: **FC Standard PC (Key ø 2 mm)**
 FC Standard PC (Key ø 2.14 mm)
 FC Standard APC (Key ø 2 mm)
 FC Standard APC (Key ø 2.14 mm)

Ferrule material: Zirconia/metal insert
 External parts: Ni-plated brass



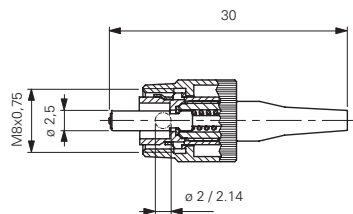
90° boot style



FC Mini connectors 900 μm - boot style

Available types: **FC Mini PC (Key ø 2 mm)**
 FC Mini PC (Key ø 2.14 mm)
 FC Mini APC (Key ø 2 mm)
 FC Mini APC (Key ø 2.14 mm)

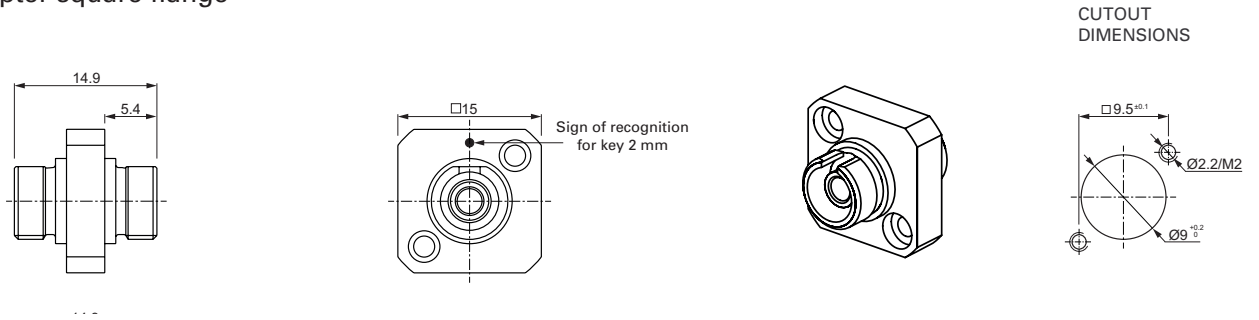
Ferrule material: Zirconia/metal insert
 External parts: Ni-plated brass



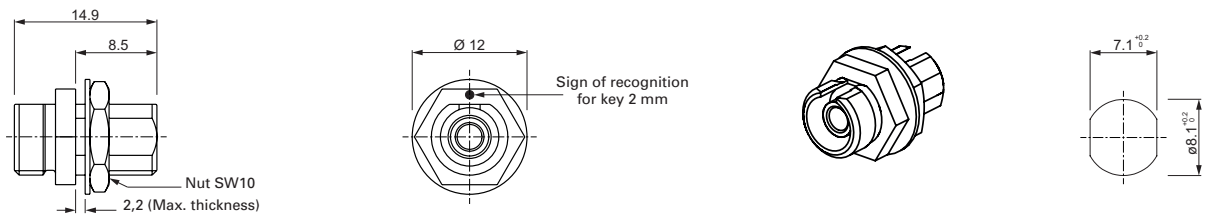
NOTE Diamond's standard **boot** colors are as follows: Black for MM PC 50μm, Beige for MM PC 62.5μm, Blue for SM PC, and Green for SM APC. Other colors are available upon request.

FC STANDARD & MINI MATING ADAPTERS

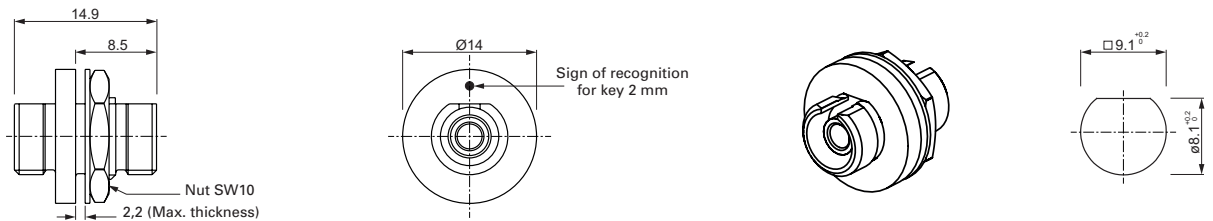
FC mating adapter square flange



FC mating adapter hexagonal flange



FC mating adapter round flange



ORDER INFORMATION

Please refer to the part numbers provided in the separate P/N list.

For other configurations, please contact your nearest local Diamond representative or fill in the contact form available on the www.diamond-fo.com website.

Other versions available upon request