# DIAMOND **Fiber Optic Components**

#### CABLE ASSEMBLIES AND ADAPTERS

Telecommunications and Fiber Optics are developing at an incredible speed. To keep up with tomorrow's requirements the F-3000<sup>™</sup> Small-Form-Factor (SFF) connector family was developed. SFF components themselves enable port spacing similar to RJ-45 design.

Thanks to the experience and good results obtained with the Diamond E-2000 $^{\text{TM}}$  connector standard, the F-3000 $^{\text{TM}}$  connector includes many of the already proven features in combination with the SFF construction.

The F-3000™ connector has been recently standardized as LF3 connector, thus clarifying and ensuring the mechanical compatibility of the F-3000™ connector with the LC adapter. This opens access to a broad field of existing applications, and will be increased with new customer specific solutions.

## **APPLICATIONS**

- Telecommunications Networks
- CATV
- Local Area Networks (LAN)
- Data Processing Networks
- ▶ FTTx

## **STANDARDS**

▶ IEC 61 754-28 "Fiber optic interconnecting devices and passive

components -

Type LF3 connector family"

Product specification: Part 16-1: Type LF3 APC ► EN 50377-16-1

simplex terminated on IEC 60793-2-50 category B1.1 and B1.3 single mode fibre with titanium

composite ferrule for Category C

The LF3 connector is compatible with all IEC 61 754-20 compliant adapters

## **AVAILABLE AS**

- Terminated connector
- Connector set, (to be terminated with Diamond special equipment)

## **SPECIFICATIONS**

STANDARD	MULTIMODE 0° PC	SINGLE MODE 0° PC	SINGLE MODE 8° APC	UNITS	TEST CONDITIONS
Insertion Loss (IL)	typ. 0.15 max. 0.4	typ. 0.1 max. 0.4	typ 0.1 max. 0.4	dB	IEC 61300-3-4; λ = 1300/1550nm
Return Loss (RL)	typ. 40	min. 50	min. 70*	dB	IEC 61300-3-6; λ = 1300/1550nm
Repeatability of IL		max. ±0.1		dB	IEC 61300-2-2; λ = 1300/1550nm
LOW IL VERSION		SINGLE MODE 0° PC	SINGLE MODE 8° APC		
Insertion Loss (IL)	-	typ. < 0.1 max. 0.15	typ. < 0.1 max. 0.15	dB	IEC 61300-3-4; λ = 1300/1550nm
Return Loss (RL)	-	min. 50	min. 85*	dB	IEC 61300-3-6; λ = 1300/1550nm
Operating temperature		-40/+85**		°C	
Storage temperature		-40/+90**		°C	
v					

<sup>\*</sup> Measured with high precision reflectometer



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Specifications subject to change without notice BDD 1950155 04\_14

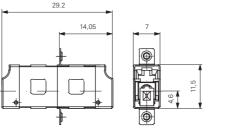
# F-3000™ Simplex

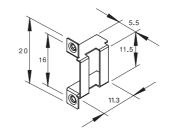
SINGLE MODE PC/APC MULTIMODE PC



## ADAPTER TYPES AND DIMENSIONS

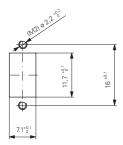
F-3000™ Simplex mating adapter with screw fixing clip



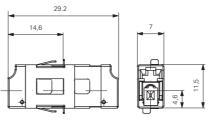


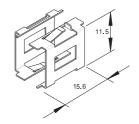
#### **CUTOUT DIMENSIONS**

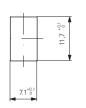
F-3000™ Simplex



## F-3000™ Simplex mating adapter with quick fixing clip



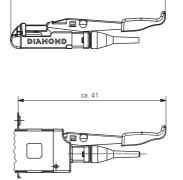


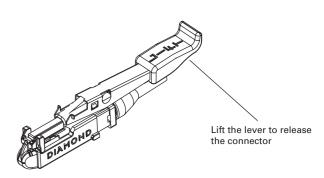


Max wall thickness 1.6 mm

## **OPTION: LONG THUMB-LATCH**

The ideal solution for special applications with difficult access



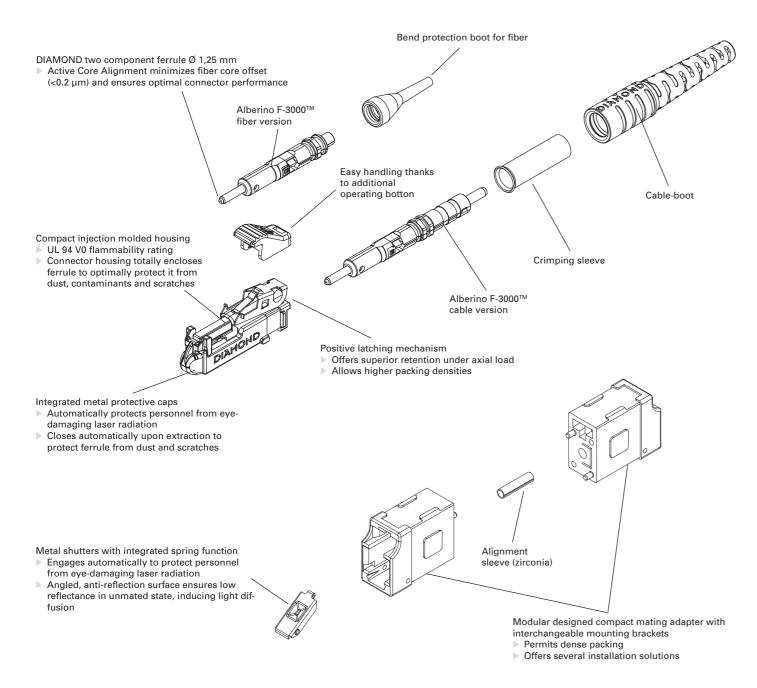


NOTES: - Cable ø 2.1 mm max.

- Please contact your local Diamond representative for additional information

<sup>\*\*</sup> May be further limited by cable specifications

F-3000™ Simplex F-3000™ Simplex



NOTE As standard, Diamond uses colored connector bodies, cable boots and mating adapter housings to identify the fiber type (SM or MM 50/62.5µm) and ferrule polish (PC or APC).

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

#### CONNECTOR TYPES AND DIMENSIONS

F-3000™ Simplex connectors 900 µm - 3 mm boot style

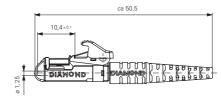
Available types: F-3000™ Simplex PC

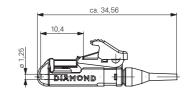
F-3000™ Simplex APC

F-3000™ Simplex APC Low IL

Ferrule material: Zirconia/metal insert

External parts: Plastic





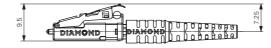


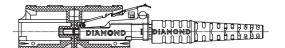
F-3000™ s Simplex connectors 900 µm - 3 mm boot style

Available types: F-3000™ s Simplex PC

F-3000™ s Simplex APC

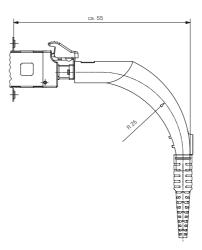
F-3000™ s Simplex APC Low IL





The new F-3000™ s without protection cap and botton is a simplified version of the F-3000 standard connector.

F-3000™ Simplex connectors 90° boot style (only for 1.6 mm - 3 mm cables)



## **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.