

DIAMOND

Fiber Optic Components

CABLE ASSEMBLIES AND ADAPTERS

The F-3000™ FUSION allows you to quickly and easily make field terminations with the performance you expect from Diamond-quality F-3000™ connectors. The key to this system is DIAMOND's advanced "crocodile alberino" 1.25mm fusion field ferrule assembly. The ferrule assembly consists of a factory-terminated fiber endface, fiber stub, and integrated splice protection. The fiber endface is core-centered via Diamond's well-known Active Core Alignment process and factory-polished to the company's precise specifications. The F-3000™ FUSION is then field terminated via a low loss fusion splice using the new Diamond ZEUS D50 Fusion Field Termination Kit. The F-3000™ FUSION is available for SM and MM fiber (250µm, 600µm and 900µm) and cable (1.6-to 3.1 mm) in both 0° PC or 8° APC versions. Other fiber types can also be accommodated upon request.

FEATURES AND BENEFITS

- ▶ Simple, fast and reliable field termination *reduces operator error and cost per termination*
- ▶ No need of glue
- ▶ Outstanding optical performance *consistent and repeatable low IL / high RL*
- ▶ No polishing *eliminates the need for costly consumables*
- ▶ Fusion spliced pigtail performance and reliability without the cost and space associated with splice enclosures, trays and protectors
- ▶ F-3000™ features:
 - Integrated protective caps and shutters for mechanical endface protection and eye-safety
 - Simplex and duplex version
 - Intermateable with a wide range of F-3000™ components including, attenuators, hybrid mating adapters, transition adapters, etc.

AVAILABLE AS

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

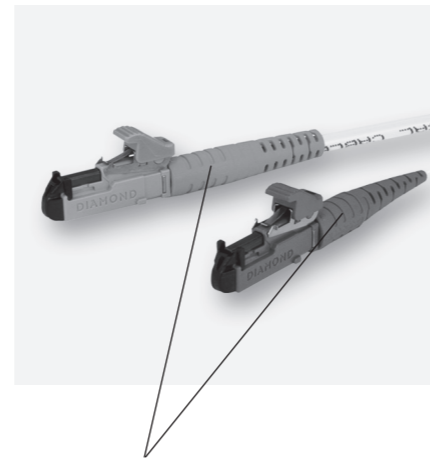
SPECIFICATIONS

	MULTIMODE 0° PC	SINGLE MODE 0° PC	SINGLE MODE 8° APC	UNITS	TEST CONDITIONS
Insertion Loss (IL)	typ. 0.2 max 0.5	typ. 0.25 max. 0.5	typ. 0.25 max. 0.5	dB	IEC 61300-3-4; λ = 1300/1550nm
Return Loss (RL)	min. 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
Service life	1000 mate/demate cycles				According to field experience
Operating temperature	-25/+70**			°C	
Storage temperature	-25/+70**			°C	

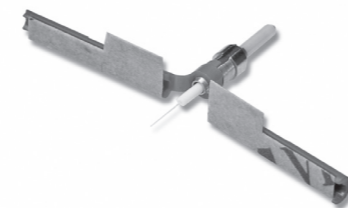
* Measured with high precision reflectometer
 ** May be further limited by cable specifications

F-3000™ Fusion

SINGLE MODE PC/APC
 MULTIMODE PC



Crocodile Alberino 1.25mm

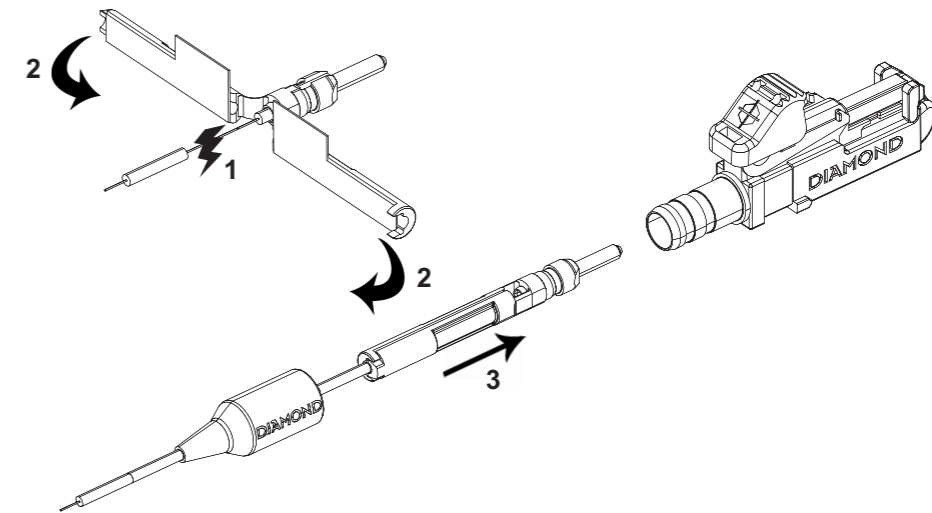


Initial condition



Closed before housing assembly

F-3000™ FUSION INSTALLATION CONCEPT



TERMINATION KIT

DIAMOND's new ZEUS D50 Fusion Field Termination Kit provides all the tools and instructions necessary for high performance field terminations of DIAMOND's Fusion E-2000™, F-3000™, SC, FC and ST™ connectors.

ORDER INFORMATION

Please refer to the part-specific ZEUS D50 Fusion Field Termination Kit datasheet.



BASE KIT

- | | |
|----------------------------|----------------------------------|
| 1. ZEUS D50 fusion splicer | 4. Holder left and right |
| 2. Fiber cleaver | 5. Connector assembling tools |
| 3. Stripping pliers | 6. Holder for Alberino Crocodile |
| - Soft bag | |



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Specifications subject to change without notice

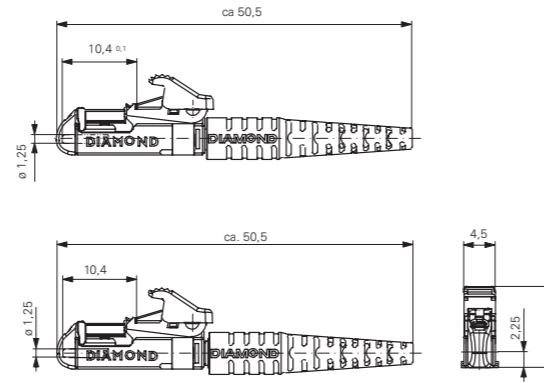
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F-3000™ FUSION SIMPLEX TYPES AND DIMENSIONS

Connectors 600 µm - 3 mm boot style

Available types: **F-3000™ Fusion Simplex PC**
F-3000™ Fusion Simplex APC

Ferrule material: Zirconia/metal insert
External parts: Plastic



F-3000™ s Simplex connectors 600 µm - 3 mm boot style

Available types: **F-3000™ s Simplex PC**
F-3000™ s Simplex APC

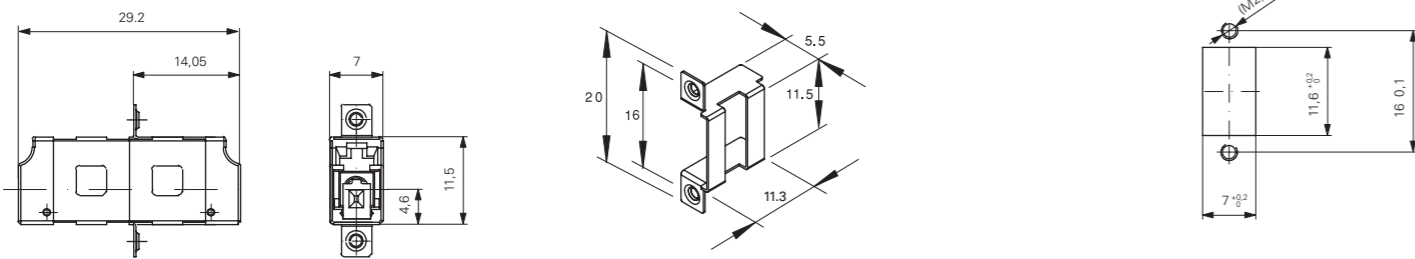


F-3000™ Simplex mating adapter

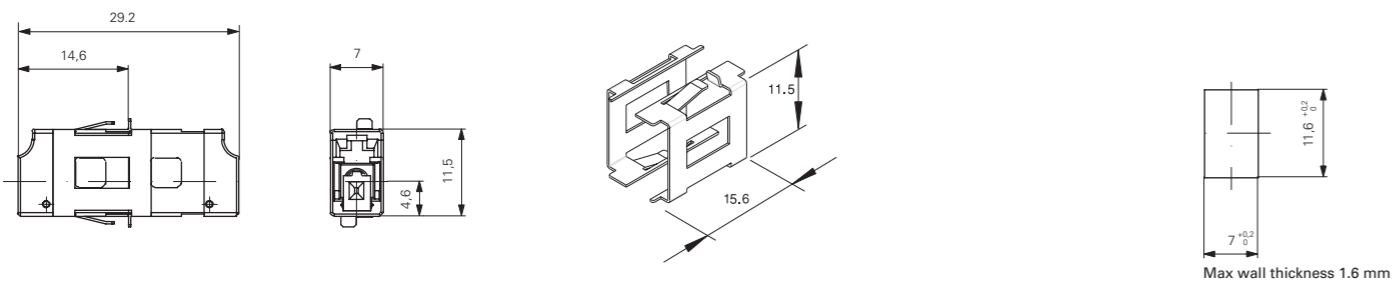
Material: Plastic
Mating sleeve: Zirconia

For complete product description and ordering information, please refer to the part-specific F-3000™ Simplex datasheet.

F-3000™ Simplex mating adapter with screw fixing clip



F-3000™ Simplex mating adapter with quick fixing clip



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/Green for SM APC. Other colors are available upon request.

ORDER INFORMATION

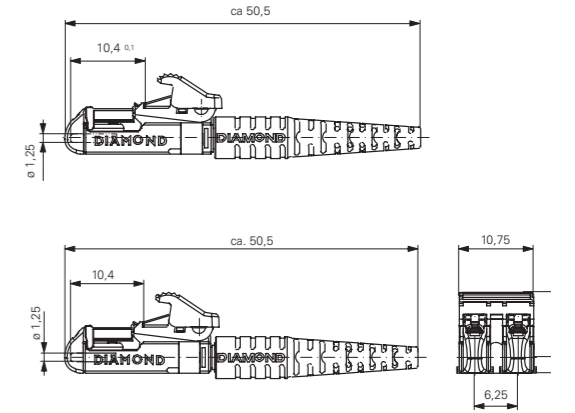
Please contact your local Diamond representative for additional information.

F-3000™ FUSION DUPLEX TYPES AND DIMENSIONS

Connectors 600 µm - 3 mm boot style

Available types: **F-3000™ Fusion Duplex PC**
F-3000™ Fusion Duplex APC

Ferrule material: Zirconia/metal insert
External parts: Plastic

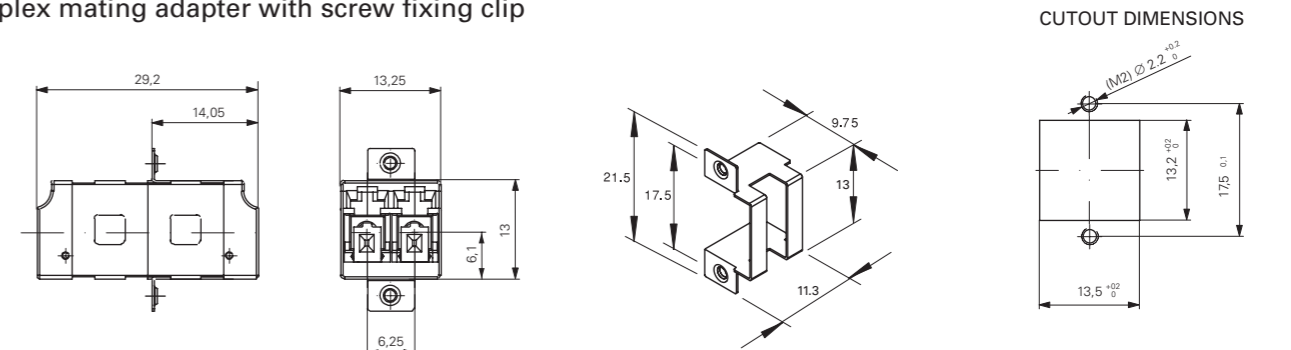


F-3000™ Duplex mating adapter

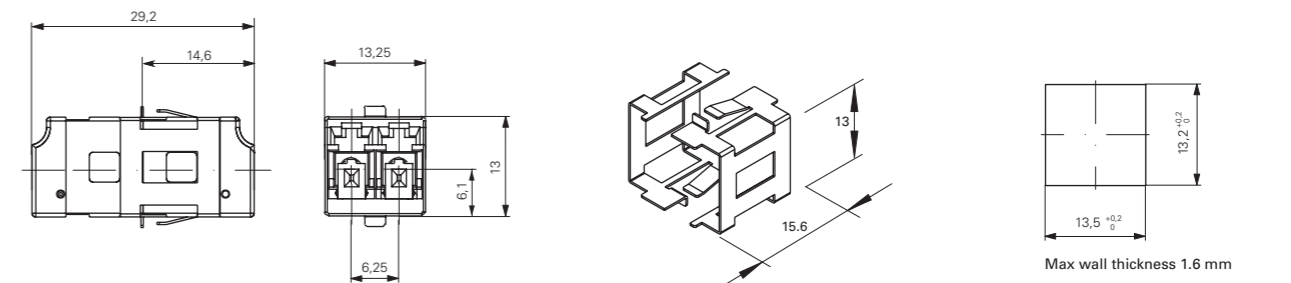
Material: Plastic
Mating sleeve: Zirconia

For complete product descriptions and ordering information, please refer to the part-specific F-3000™ Duplex datasheet.

F-3000™ Duplex mating adapter with screw fixing clip



F-3000™ Duplex mating adapter with quick fixing clips



F-3000™ Duplex mating adapter with 45° screw fixing clip

