

DIAMOND

Fiber Optic Components

CABLE ASSEMBLIES AND ADAPTERS

Current installation techniques for Fiber Optics, either indoor or outdoor, tend to reduce installation times and expenses while keeping high quality standards. Diamond's ferrule assembly for F-3000™ connectors (LC compliant) is a new compact pre-connectorized system which can be used in substitution to a standard Break-out cable within ducts of very small size or to be blown into microducts, offering an easy and reliable solution to perform FTTx installations. After installation, the ferrule assembly can easily and rapidly be connectorized, avoiding time-consuming and expensive field termination tools and equipments. This new Diamond ferrule assembly is available for Singlemode and Multimode fibers in PC 0° version.

Typical applications include FTTx, Telecommunications Networks, CATV, Local Area Networks (LAN) and Data Processing Networks.

FEATURES AND BENEFITS

- ▶ Pre-terminated cable system
 - No need for field splicing and skilled installers.
- ▶ Factory manufacturing including measurement reports
 - Functioning Warranty and therefore no need for field measurement equipments
- ▶ Ferrule assembly manufactured with Diamond Active Core Alignment
 - Superior optical performances
- ▶ 1,25mm Ferrule assembly
 - Termination of SFF F-3000™ r standard or F-3000™ rs connectors suitable for the new generation of SFF and SFP components

STANDARDS

- ▶ IEC 61 754-20 "Fiber optic connector interfaces - Type LC connector family"
- ▶ TIA/EIA 604-10-A "Fiber optic intermateability standard -Type LC"

AVAILABLE AS

- ▶ Pre-connectorized ferrule assembly, to be terminated with Diamond special tools
- ▶ Typical assemblies are pigtailed, patchcords on cable drums from 50 to 400 m.

SPECIFICATIONS

	MULTIMODE 0° PC	SINGLE MODE 0° PC	UNITS	TEST CONDITIONS
Insertion Loss (IL)	typ. 0.25 max. 0.5		dB	IEC 61300-3-4; $\lambda = 1300\text{nm}$
Return Loss (RL)	min 40	min 50	dB	IEC 61300-3-6; $\lambda = 1300\text{nm}$
Repeatability of IL	max ± 0.15		dB	IEC 61300-2-2; $\lambda = 1300/1550\text{nm}$
Service life	min. 1000 mate/demate cycle		-	According to field experience
Operating temperature	-25/+70*		°C	

* May be further limited by cable specifications

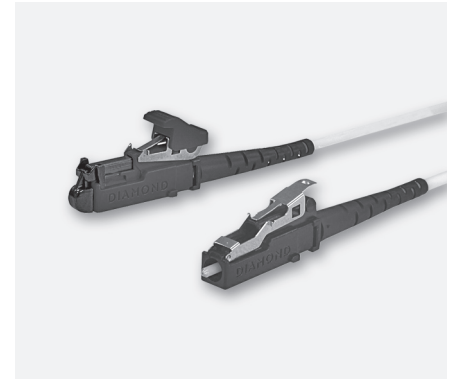


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F-3000™ LC r and rs

SINGLE MODE PC
MULTIMODE PC



F-3000™ LC r and F-3000™ LC rs connectors



1,25 mm Ferrule assembly
(Alberino F-3000™ LC r)



Break-out cable

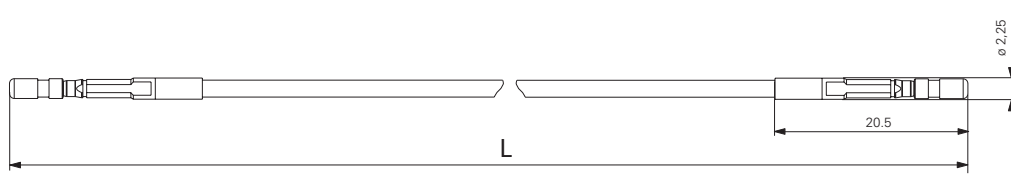
Specifications subject to change
without notice

BDD 1951021 088

CONNECTOR TYPES AND DIMENSIONS

The patchcord/pigtail design is based on following components:

- ▶ PC prepolished "Alberino F-3000™ LC r" for F-3000™ LC r or rs Simplex connectors with max. 1.8 mm boot style



Available types:

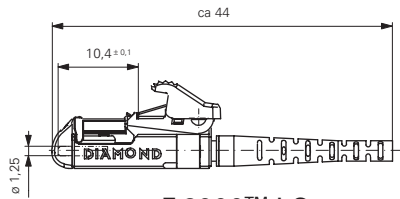
Alberino F-3000™ LC r PC
Alberino F-3000™ LC rs PC

Ferrule material:

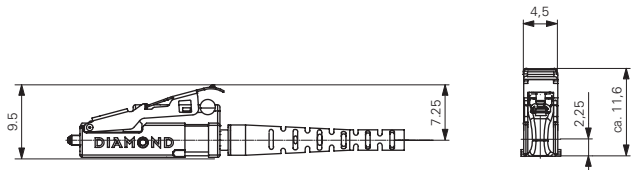
Zirconia/metal insert

Connector body:

Plastic black



F-3000™ LC r

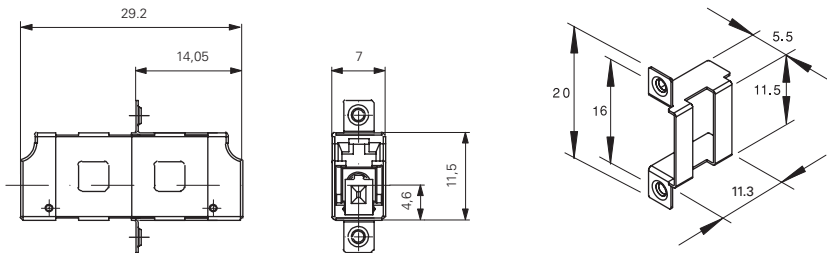


F-3000™ LC rs

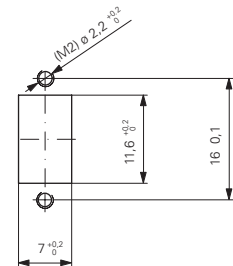
The F-3000™ LC rs without protection cap and bottom is a simplified version of the F-3000™ standard connector. It enables the access to SFF and SFP components, ensuring full compatibility with today's LC non-compliant transceivers.

ADAPTER TYPES AND DIMENSIONS

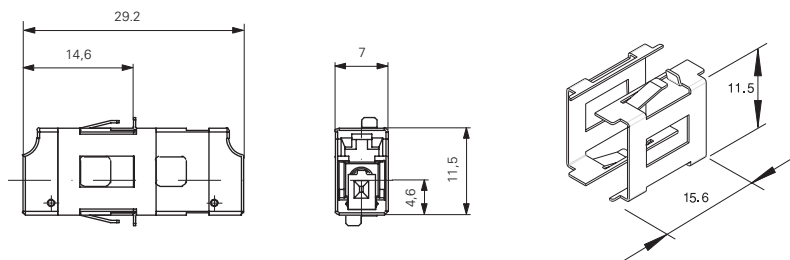
F-3000™ Simplex mating adapter with screw fixing clip



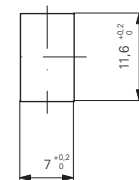
CUTOUT DIMENSIONS



F-3000™ Simplex mating adapter with quick fixing clip



Max wall thickness 1.6 mm



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). F-3000™ r **connector/boot** colors are as follows: Black/Black for MM PC 50µm, Black/Beige for MM PC 62.5µm, Black/Blue for SM PC. Other colors are available upon request.

ORDER INFORMATION

To order Field Termination Kit, housing connector sets and mating adapters, please refer to the part numbers provided in the enclosed P/N list.

When ordering pigtails or cable assemblies, please refer to the **assemblies type description** in the Available types section, and fill in the Simplex, Duplex, Multiple fiber Assemblies order form according to **those** denominations.