

DIAMOND

Fiber Optic Components

CABLE ASSEMBLIES AND ADAPTERS

The F-3000™ ODVA connector system provides exceptional optical performance in a robust, IP67-rated and shock resistant EN 50516-2-1 compliant housing. The rugged design makes it suitable for fiber to the antenna, industrial applications, laboratory environments, food processing plants and other harsh environments such as: field-deployable communications, mobile diagnostic units, industrial machine networks, and machine controls installations requiring long transmission distances, high data rates, or reliability in a harsh environment. The F-3000™ ODVA panel adapters include 1x F-3000™ duplex mating adapter PC or APC version, which combines the advantages of a spring-loaded metal protection shutters and a high precision alignment sleeve (zirconia). The F-3000™ ODVA connector is terminated with Diamond's homologated MM and SM cable (Customer cable assemblies available upon request).

FEATURES

- ▶ Rugged IP67 rated enclosure
- ▶ F-3000™ (LC) SFF PC/APC connector system terminated with Diamond's Active Core Alignment
Exceptional optical performance in a high density LC standard compliant connector. Integrated caps on the connectors and shutters in the couplers provide both laser eye safety and end face protection during mating/demating
- ▶ Bayonet-style self-aligning, keyed housing
Ease of use in all mating situations

STANDARDS

- ▶ IEC 50516-2-1 "Industrial connector sets and interconnect components to be used in optical fibre control and communication systems".

AVAILABLE TYPES

- ▶ Terminated connector
- ▶ 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. 0.15 max. 0.4	typ. 0.2 max. 0.4	typ 0.2 max. 0.4	dB	IEC 61300-3-4; λ = 1300/1550nm
Return Loss (RL)	typ. 40	min. 50	min. 75*	dB	IEC 61300-3-6; λ = 1300/1550nm
Repeatability of IL	max. ±0.1			dB	Over service life
Service life	500 mate/demate cycles				
Operating temperature	-40/+85**			°C	

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

F-3000™ ODVA

(HARSH ENVIRONMENT)

SINGLE MODE PC/APC
MULTIMODE PC



F-3000™ ODVA 2 channel male connector



F-3000™ ODVA 2 channel bulkhead



DIAMOND SA • Via dei Patrizi 5 • CH-6616 Losone - Switzerland
Tel. +41 91 785 45 45 • Fax +41 91 785 45 00 • e-mail info@diamond-fo.com

www.diamond-fo.com

Specifications subject to change
without notice

BDD 1951336 11_13

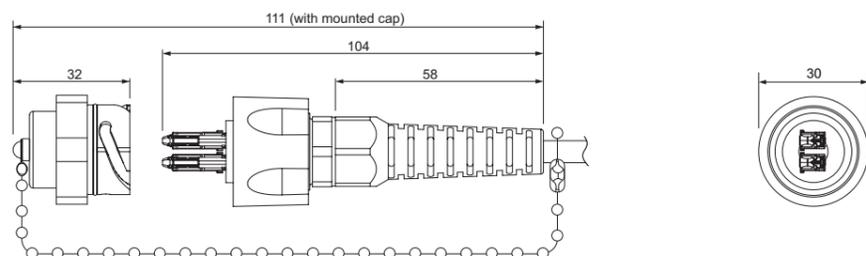
D

CONNECTOR AND BULKHEAD TYPES AND DIMENSIONS

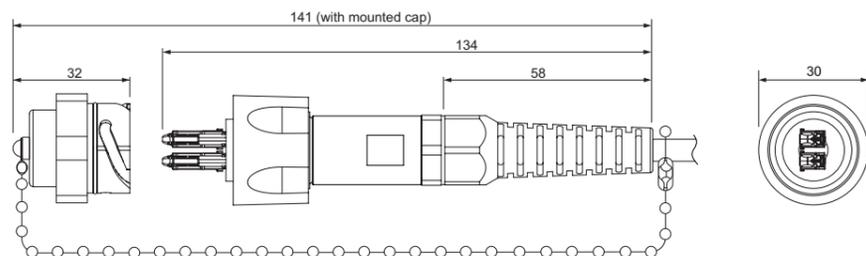
F-3000™ ODVA male connector

Available types: F-3000™ ODVA male PC
F-3000™ ODVA male APC

Housing material: Plastic

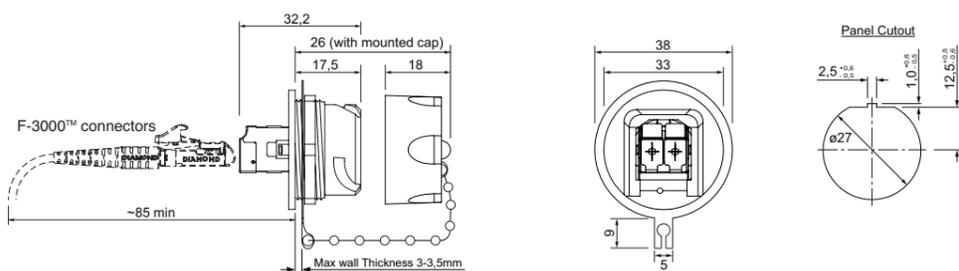


F-3000™ ODVA Fusion version

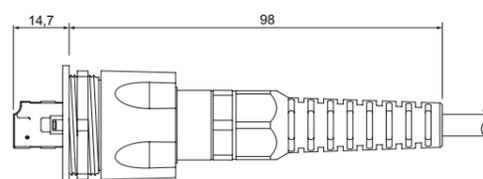


F-3000™ ODVA bulkhead

Housing material: Plastic
Mating sleeve: Zirconia

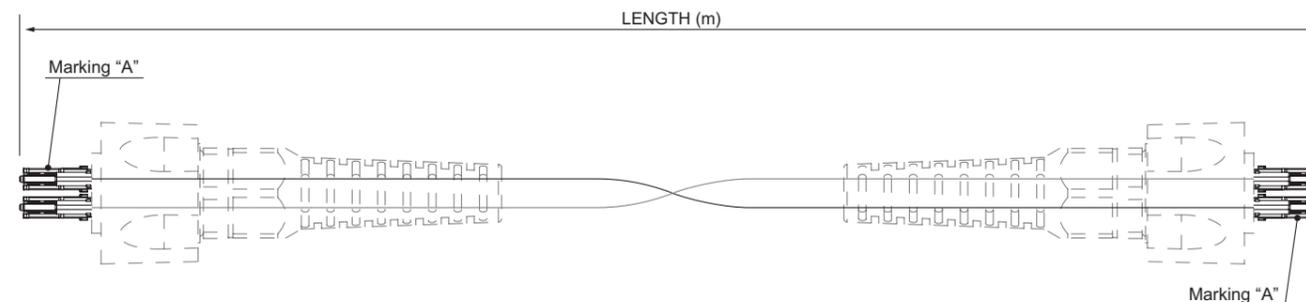


Bulkhead and male connector

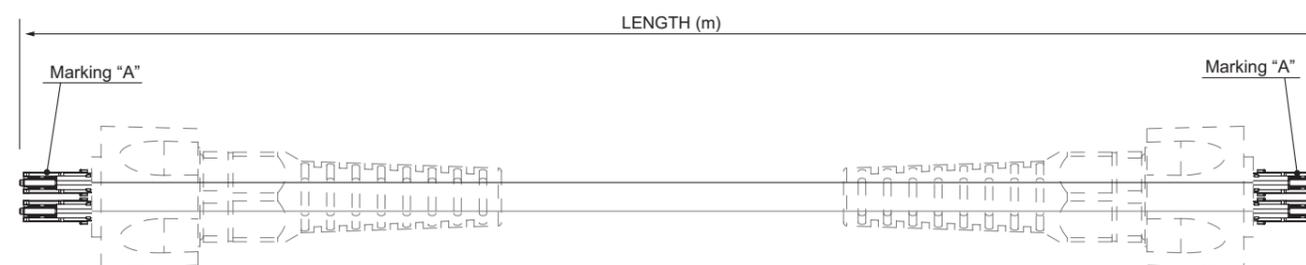


AVAILABLE CONFIGURATIONS

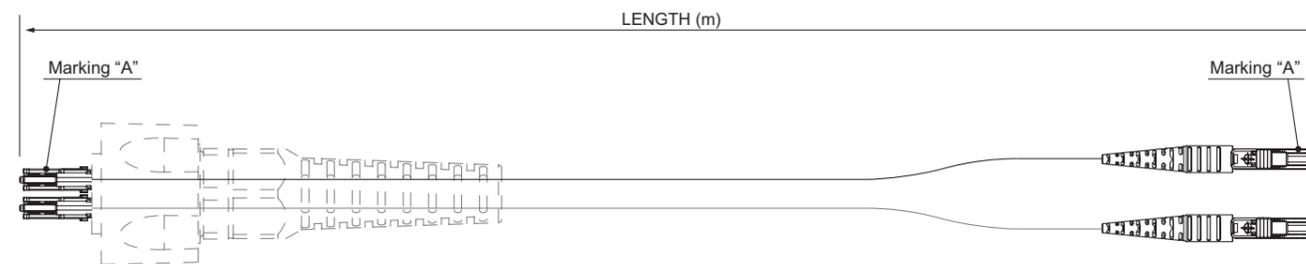
Patchcord "≡"



Patchcord "X"



Hybrid Patchcord



NOTE As standard, Diamond uses colored connector bodies and mating adapter housings to identify the fiber type (SM or MM) and ferrule polish (PC or APC). Diamond's standard **connector/adaptor** colors are as follows: Beige/Beige for MM PC, Blue/Blue for SM PC, and Green/Green for SM APC. Other colors are available upon request.

ORDER INFORMATION

When ordering adapters, please refer to the part numbers provided in the enclosed P/N list. When ordering pigtails or cable assemblies, please refer to the **connector type description** in the Available types section, and fill in the "Harsh environment Assemblies" order form according to **those** denominations.