

DIAMOND

Fiber Optic Components

NETWORK ACCESSORIES

DESCRIPTION

This small form factor (SFF) in-line attenuator is fully LC compatible and provide a precise and repeatable amount of light loss (attenuation) via a doped fiber. This results in wavelength independent and stable attenuation values for typical wavelength bands used in telecommunication applications (1260-1360 and 1460-1580 nm). These high performance attenuators are packaged in a robust and convenient 33 mm long housing, are suitable for optical power up to +20dBm, and are available in SM PC and high return loss (HRL) APC versions.

STANDARD

IEC/PAS 61754-20 "Fiber optic connector interfaces"
- Part 20: "Type LC connector family".

SPECIFICATIONS

	SINGLE MODE 0° PC			SINGLE MODE 8° APC					UNITS	
Fiber	9/125								μm	
Wavelengths	1260-1360 and 1460-1580								nm	
Nominal attenuation Tolerance*	2 ±0.5	4 ±0.5	5 ±0.5	6 ±0.5	10 ±1	15 ±1.5	20 ±2	25 ±2.5	30 ±2.5	dB dB
Repeatability	<0.5 over service life								dB	
Service life	1000 matings (According to field experience)									
Return loss	>45				>65				dB	
Temperature range	-25/+70								°C	

* Values measured using 1310 or 1550 nm LED source. Additional IL induced by modal noise 0,05 dB/dB.
The excess attenuation due to the 2 connections may be as high as 0.5 dB max.

TYPES AND DIMENSIONS

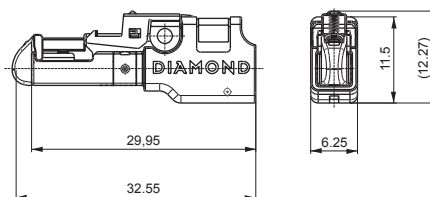
OAF F-3000™ SM

Available types:

OAF F-3000™ PC SM
OAF F-3000™ APC SM

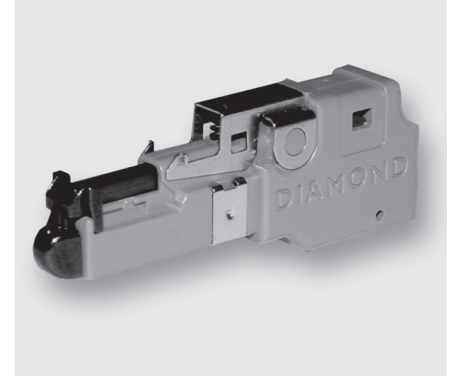
Ferrule type:
Alignment sleeve:
External parts:

Standard ø1.25 mm Zirconia/Cu-Ni alloy
Zirconia
Standard blue plastic housing for PC, and
green for APC version.



OAF F-3000™

SINGLE MODE PC
SINGLE MODE APC



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Specifications subject to change
without notice

BDD 1950283 048

CLEANING OF ATTENUATORS ENSURES LONGTERM REPEATABILITY OF ATTENUATION VALUES AND ENSURES EXTENDED LIFE OF THE FIBER MATING END FACE.

The OAF F-3000™ series has been designed with a removable ferrule for easy cleaning.

CLEANING PROCEDURE

- ▶ Slide the service adaptor (Order number provided below) over the male end of the attenuator, to open the dust cap (Fig. 1).

- ▶ Position the ferrule release tool over the attenuator body (Fig. 2) and push it down until the tool engages the metal latching mechanism and the ferrule is released (Fig. 2a).

NOTE Ensure that the ferrule release tool is properly orientated.

- ▶ First remove the ferrule from the attenuator body (Fig. 3) followed by the ferrule release tool.

- ▶ Slide off the alignment sleeve and spacer from the ferrule.

- ▶ Clean both ends of the ferrule as described in our cleaning procedure.

DIAMOND offers a cleaning set containing all necessary tools and a 300x microscope for visual inspection.

- ▶ Once both ends of the ferrule have been cleaned reassemble the spacer and alignment sleeve (Fig. 4).

- ▶ Insert the ferrule in the attenuator body (Fig. 5) until it positively engages, then push up the metal latching mechanism to secure it in place.

NOTE For HRL APC ferrules, ensure that the flat face of the ferrule is facing the top of the attenuator body.

- ▶ Remove the service adapter (Fig 6).
- ▶ The attenuator is now ready for use.

Cleaning tools: - Service adapter
- Handling tool
- Ferrule release tool

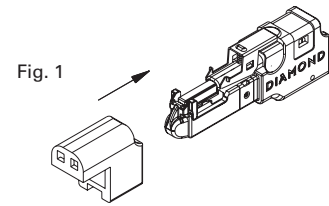


Fig. 1

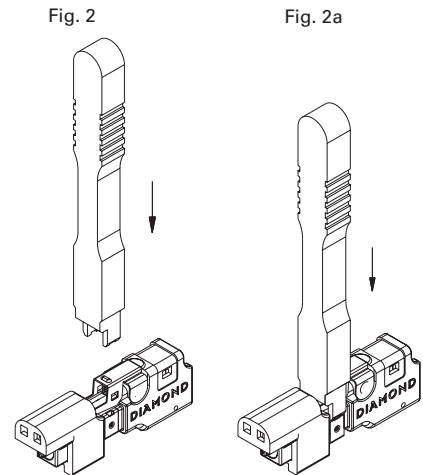


Fig. 2

Fig. 2a

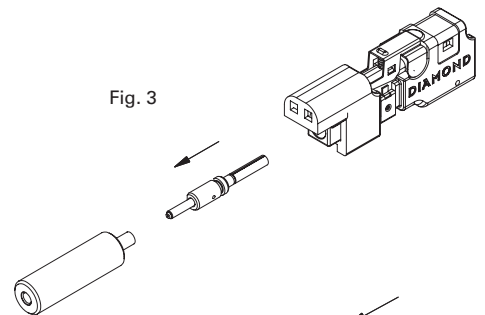


Fig. 3

Fig. 4

Fig. 5

Fig. 6

ORDER INFORMATION

To order OAF F-3000™ and cleaning tools, please refer to the part numbers provided in the enclosed P/N list.

Other versions, as well as attenuation values and fiber types available upon request.