

DIAMOND

Fiber Optic Components

The E-2000™ FUSION allows you to quickly and easily make field terminations with the performance you expect from Diamond-quality E-2000™ connectors. The key to this system is DIAMOND's advanced "crocodile alberino" 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 exacting specifications. The E-2000™ FUSION is then field terminated via a low loss fusion splice using the Diamond Fusion Field Termination Kit. The E-2000™ FUSION is available for SM and MM fiber (250 & 900 μm) and cable (2.1-to 3.1 mm) in both 0° PC or 8° APC versions. Other fiber types can also be accommodated upon request.

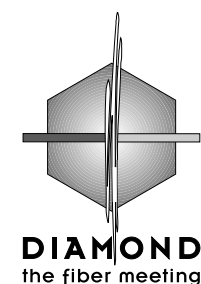
FEATURES AND BENEFITS

- Simple, fast and reliable field termination *reduces operator error and cost per termination*
- Outstanding optical performance *consistent and repeatable low IL / high RL*
- No polishing *eliminates the need for costly consumables operator independent performance*
- Fusion spliced pigtail performance and reliability without the cost and space associated with splice enclosures, trays and protectors
- E-2000™ features:
 - Integrated protective caps and shutters for mechanical endface protection and eye-safety
 - Interchangeable, user-definable color-coding and mechanical keying options
 - Simplex and small form factor density duplex options
 - Intermateable with a wide range of E-2000™ components including, attenuators, hybrid mating adapters, transition adapters, etc.

SPECIFICATIONS

	Multimode	Single mode	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
Reflectance (RL)	min 40	min 50	min 70*	dB	IEC 61300-3-6; λ= 1300/1550nm
Repeatability of IL	max ±0.1			dB	
Service life	1000 mate/demate cycles				
Operating temperature	-25 / +70**			°C	
Storage temperature	-25 / +70**			°C	

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



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

E-2000™ FUSION

SINGLE MODE/ MULTIMODE



Crocodile Alberino



Initial condition



Spliced

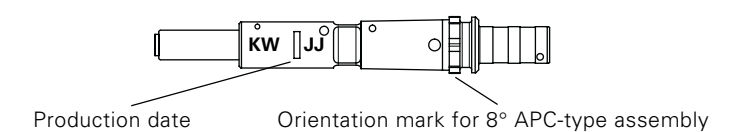
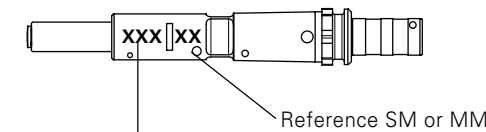


Closed before housing assembly

Specifications subject to change without notice

002-037-210P013083

DIAMOND FUSION MARKINGS



Codes for preterminated standard fiber stubs	
100	SMF-28 9 μm
210	MM TB OM3 50 μm
201	MM TB GI 62.5 μm

Standard components are preterminated with Corning SMF - 28 fiber stubs. Please contact your DIAMOND sales office if another fiber type is required.

Standard components are preterminated with 50/125 μm OM3 type and GI 62.5/125 μm fiber stubs. Please contact your DIAMOND sales office if another fiber type is required.

TERMINATION KIT

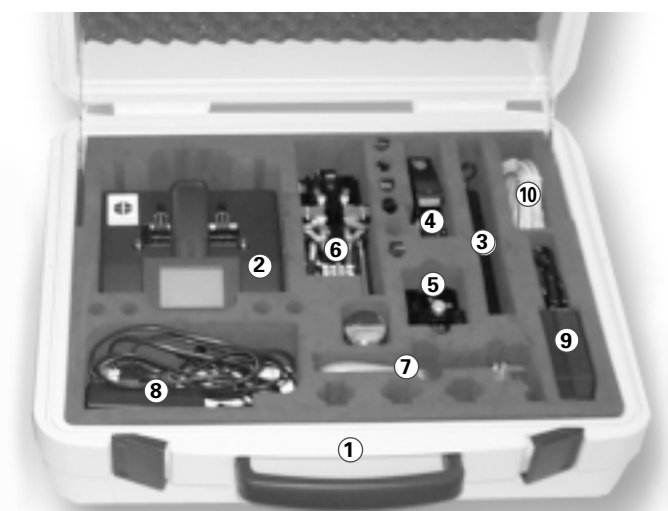
DIAMOND's Fusion Field Termination Kit provides all the tools and instructions necessary for high performance field terminations of DIAMOND's FUSION connectors.

ORDER INFORMATION

Fusion Field Termination Kit: 241-100-050V001

KIT CONTENTS

Description
1 Rugged carrying case
2 Diamond Fusion Splicer (DFS)
3 DFS battery
4 Fiber stripper
5 Precision cleaver
6 "Crocodile alberino" closing tool
7 E-2000, SC, FC and ST connector assembly tools
8 Power supply 120/240 V
9 Battery charger 120/240 V
10 RJ-45 crossed interface cable



Space requirement: ca. 540 x 430 x 210 mm
 Weight: ca. 12.5 Kg

CONNECTOR E-2000™ (LSH)

SINGLE MODE PC

Type designation: **E-2806.6**

Ferrule material: Zirconia/copper-nickel alloy insert (Pilzferrule)

External parts: Plastic (blue)

Polish geometry: Convex (PC)

Dimensions Fiber/Cable	Order Number
9/125/900	- 003 - 001 L 000
9/125/900/1800	- 003 - 006 L 000
9/125/900/2100	- 003 - 002 L 000
9/125/900/2500	- 003 - 003 L 000
9/125/900/3000	- 003 - 004 L 000

COLOR CODING

Thumb-latch	blue	green	black	red	orange	yellow	white	violet
Order No.	300	310	320	330	340	350	360	370

MECHANICAL KEYING

Thumb-latch No.	1-1 (red)	2-2 (brown)	3-3 (yellow)	4-4 (orange)	5-5 (violet)	6-6 (white)	—	—
Order No.	400	410	420	430	440	450	—	—

MULTIMODE

Type designation: **E-2816.6**

Ferrule material: Zirconia/copper-nickel alloy insert (Pilzferrule)

External parts: Plastic (blue)

Polish geometry: Convex (PC)

GI 50/125		GI 62,5/125	
Dimensions Fiber/Cable	Order Number	Dimensions Fiber/Cable	Order Number
50/125/900	- 003 - 001 L 000	62,5/125/900	- 003 - 011 L 000
50/125/900/1800	- 003 - 006 L 000	62,5/125/900/1800	- 003 - 016 L 000
50/125/900/2100	- 003 - 002 L 000	62,5/125/900/2100	- 003 - 012 L 000
50/125/900/2500	- 003 - 003 L 000	62,5/125/900/2500	- 003 - 013 L 000
50/125/900/3000	- 003 - 004 L 000	62,5/125/900/3000	- 003 - 014 L 000

COLOR CODING

Thumb-latch	blue	green	black	red	orange	yellow	white	violet
Order No.	301	311	321	331	341	351	361	371

MECHANICAL KEYING

Thumb-latch No.	1-1 (red)	2-2 (brown)	3-3 (yellow)	4-4 (orange)	5-5 (violet)	6-6 (white)	—	—
Order No.	401	411	421	431	441	451	—	—

SINGLE MODE APC

Type designation: **E-2808.6**

Ferrule material: Zirconia/copper-nickel alloy insert (Pilzferrule)

External parts: Plastic (green)

Polish geometry: 8° angled (APC)

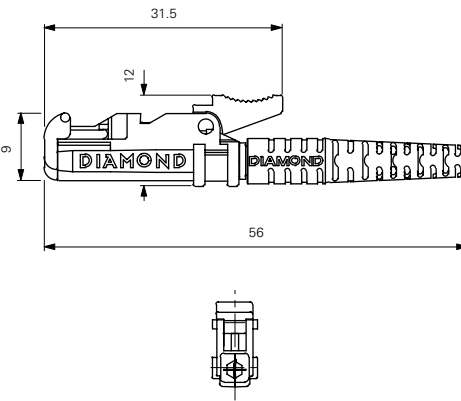
Dimensions Fiber/Cable	Order Number
9/125/900	- 003 - 001 L 000
9/125/900/1800	- 003 - 006 L 000
9/125/900/2100	- 003 - 002 L 000
9/125/900/2500	- 003 - 003 L 000
9/125/900/3000	- 003 - 004 L 000

COLOR CODING

Thumb-latch	green	blue	black	red	orange	yellow	white	violet
Order No.	302	312	322	332	342	352	362	372

MECHANICAL KEYING

Thumb-latch No.	1-1 (red)	2-2 (brown)	3-3 (yellow)	4-4 (orange)	5-5 (violet)	6-6 (white)	—	—
Order No.	402	412	422	432	441	452	—	—



CONNECTOR E-2000™ COMPACT

SINGLEMODE PC

Type designation: **E-2846.6 COMPACT**

Ferrule material: Zirconia/copper-nickel alloy insert (Pilzferrule)

External parts: Plastic (blue)

Polish geometry: Convex (PC)

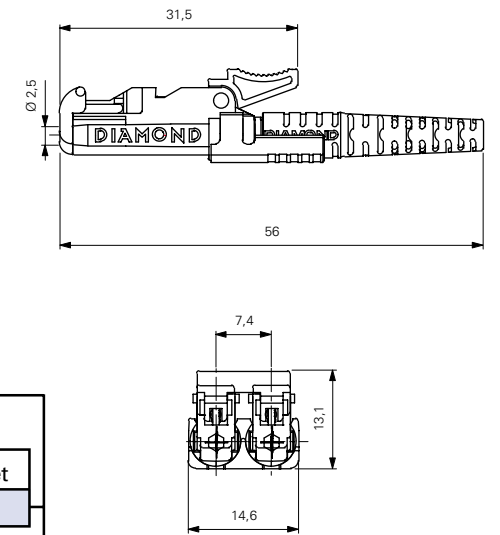
Dimensions Fiber/Cable	Order Number
9/125/900	- 003 - 001 L 000
9/125/900/3000/6500	- 003 - 004 L 000

COLOR CODING

Thumb-latch	blue	green	black	red	orange	yellow	white	violet
Order No.	500	510	520	530	540	550	560	570

MECHANICAL KEYING

Thumb-latch No.	1-1 (red)	2-2 (brown)	3-3 (yellow)	4-4 (orange)	5-5 (violet)	6-6 (white)	—	—
Order No.	600	610	620	630	640	650	—	—



MULTIMODE

Type designation: **E-2856.6 COMPACT**

Ferrule material: Zirconia/copper-nickel alloy insert (Pilzferrule)

External parts: Plastic (blue)

Polish geometry: Convex (PC)

GI 50/125		GI 62,5/125	
Dimensions Fiber/Cable	Order Number	Dimensions Fiber/Cable	Order Number
50/125/900	- 003 - 001 L 000	62,5/125/900	- 003 - 011 L 000
50/125/900/3000/6500	- 003 - 004 L 000	62,5/125/900/3000/6500	- 003 - 014 L 000

COLOR CODING

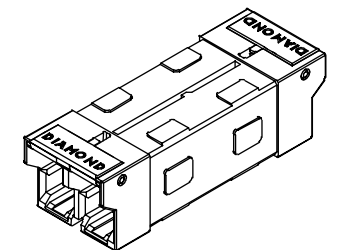
Thumb-latch	blue	green	black	red	orange	yellow	white	violet
Order No.	501	511	521	531	541	551	561	571

MECHANICAL KEYING

Thumb-latch No.	1-1 (red)	2-2 (brown)	3-3 (yellow)	4-4 (orange)	5-5 (violet)	6-6 (white)	—	—
Order No.	601	611	621	631	641	651	—	—

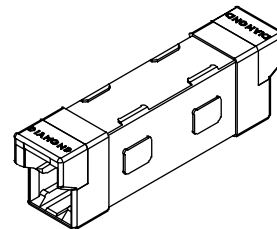
ADAPTER

For complete product descriptions and ordering information, please refer to the part-specific data sheets E-2211.-2*** COMPACT.



ADAPTER

For complete product descriptions and ordering information, please refer to the part-specific data sheets E-2201.-2***.



SINGLE MODE APC

Type designation: **E-2848.6 COMPACT**

Ferrule material: Zirconia/copper-nickel alloy insert (Pilzferrule)

External parts: Plastic (green)

Polish geometry: 8° angled (APC)

Dimensions Fiber/Cable	Order Number
9/125/900	- 003 - 001 L 000
9/125/900/3000/6500	- 003 - 004 L 000

COLOR CODING

Thumb-latch	green	blue	black	red	orange	yellow	white	violet
Order No.	502	512	522	532	542	552	562	572

MECHANICAL KEYING

Thumb-latch No.	1-1 (red)	2-2 (brown)	3-3 (yellow)	4-4 (orange)	5-5 (violet)	6-6 (white)	—	—
Order No.	602	612	622	632	642	652	—	—