

# DIAMOND

## Fiber Optic Components

**E-2000™**

SINGLE MODE /  
MULTIMODE (CECC/IEC LSH)

**E-2106.6/E-2116.6**

SINGLE MODE APC

**E-2108.6** (CECC/IEC LSH-HRL)

Constant innovation in the field of fiber optics has created demand for products with ever increasing performance requirements. Diamond has responded to this challenge and expanded the **E-2000™** connector system to address these increased needs throughout all market segments. In addition to the already existing superior design of the **E-2000™** technology, new innovative features have been added to the next generation of **E-2000™** to address the customer's highest expectations.

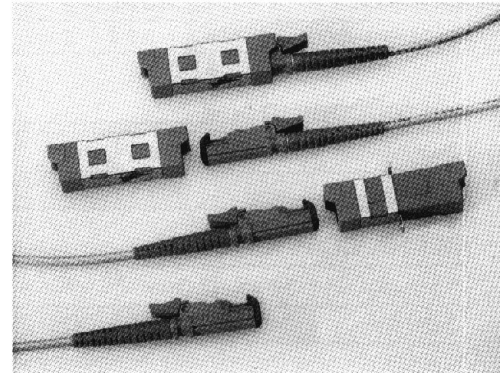
The new **E-2000™ 0.1 dB** offers now unparalleled 0.1 dB maximum insertion loss random mating, exceptional repeatability, while maintaining the already well established, superior features of the **E-2000™** connector family.

Features and benefits include:

- Color-coding and mechanical keying to ensure correct matings.
- Spring-loaded protective cap for high power applications providing increased safety protection.
- Modular designed mating adapters with metal protective shutters for high power applications (available as single and compact duplex).
- **E-2000™** body designed to prevent endface damages during mating process.

#### Standards:

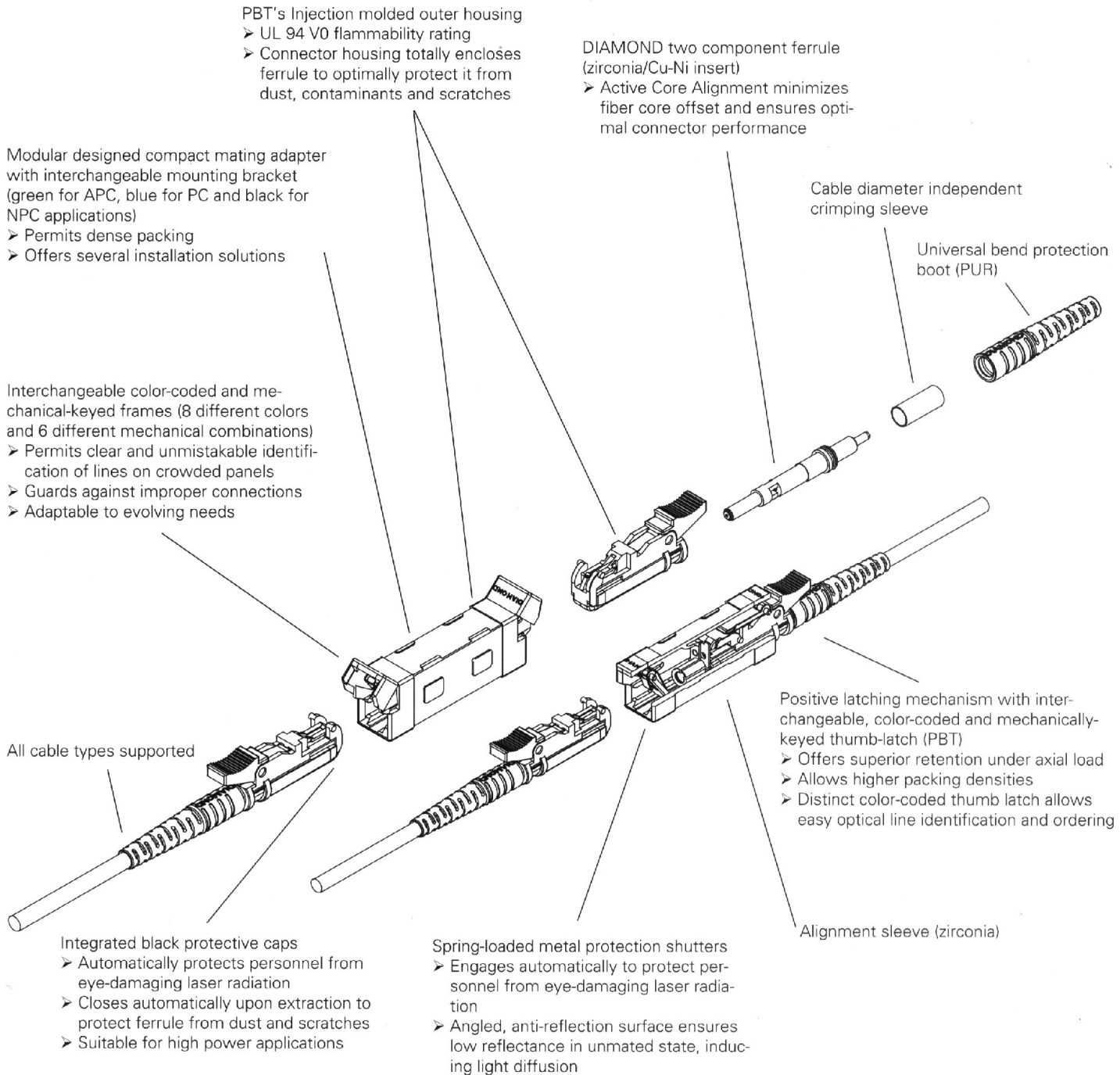
- **EN 86 275-801** Detail Specification:  
"Connector sets of assessed quality for optical fibers and cables - Type LSH universal" (05/99)
- **EN 86 275-802** Detail Specification:  
"Connector sets of assessed quality for optical fibers and cables - Type LSH-HRL universal" (05/99)
- **IEC 61 754-15** "Fiber optic connector interfaces – Part 15: Type LSH connector family"
- **etc 222** Diamond internal Standard:  
"**E-2000™** - 0.1 dB original"



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

*Specifications subject to changes  
without notice*

002-037-210P009120



## Specifications:

	Multimode	Single mode 0°PC	Single mode 8°APC	Single mode 8° 0.1 dB	Units	Test conditions
<b>Insertion Loss (IL)</b>	type 0.15 max 0.4	type 0.2 max 0.4	type 0.2 max 0.4	max 0.1	dB	IEC 1300-3-4; λ = 1300/1550nm
<b>Return Loss (RL)</b>	typ 40	min 50	min 70*	min 85*	dB	IEC 1300-3-6; λ = 1300/1550nm
<b>Repeatability of IL</b>	max ±0.1			-	dB	Over service life
<b>Service life</b>	1000 mate/demate cycles					
<b>Operating temperature</b>					°C	
<b>Storage temperature</b>					°C	

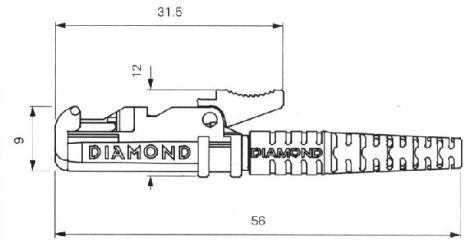
\* Measured with high precision reflectometer.

\*\* May be further limited by cable specifications.

## Order information for connectors:

Order Number Codes	
<sup>1</sup> Connector code	
<sup>2</sup> Connector code for termination on other end of assembly:	
- For pigtails	insert 000
- For patch assemblies	insert connector code for other connector
<sup>3</sup> Code for fiber or cable	
<sup>4</sup> Connector type:	max 0.4 dB: insert "L"                      max 0.1 dB: insert "H"
<sup>5</sup> Length in meters	

Type designation: **E-2106.6-11**  
 Ferrule material: Zirconia/copper-nickel alloy insert (Pilzferrule)  
 External parts: Plastic (blue)  
 Polish geometry: Convex (PC)



Dimensions Fiber/Cable	Order Number	
	Unterminated connector	Terminated assembly
9/125/900	- 000 - 001 L 000	- xxx - 001 L xxx
9/125/900/2100	- 000 - 002 L 000	- xxx - 002 L xxx
9/125/900/2500	- 000 - 003 L 000	- xxx - 003 L xxx
9/125/900/3000	- 000 - 004 L 000	- xxx - 004 L xxx
9/125/900/3500	- 000 - 005 L 000	- xxx - 005 L xxx

**COLOR CODING**

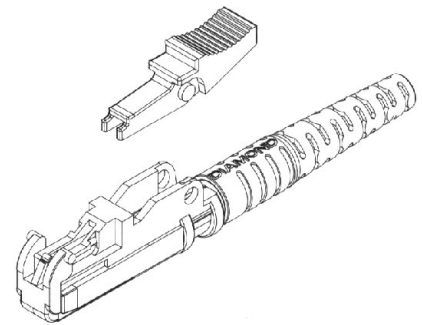
Thumb-latch	blue	green	black	red	orange	yellow	white	violet
Order No.	300	310	320	330	340	350	360	370

**MECHANICAL KEYING**

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

Connectors for other fiber and cable dimensions available upon request.

Type designation: **E-2116.6-11**  
 Polish geometry: Convex (PC)



Dimensions Fiber/Cable	Order Number	
	Unterminated connector	Terminated assembly
50/125/900	- 000 - 001 L 000	- xxx - 001 L xxx
50/125/900/2100	- 000 - 002 L 000	- xxx - 002 L xxx
50/125/900/2500	- 000 - 003 L 000	- xxx - 003 L xxx
50/125/900/3000	- 000 - 004 L 000	- xxx - 004 L xxx
50/125/900/3500	- 000 - 005 L 000	- xxx - 005 L xxx
62.5/125/900/3000	- 000 - 001 L 000	- xxx - 011 L xxx
62.5/125/900/3500	- 000 - 004 L 000	- xxx - 014 L xxx

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

Connectors for other fiber and cable dimensions available upon request.

Type designation: **E-2108.6-22**  
 Ferrule material: Zirconia/copper-nickel alloy insert (Pilzferrule)  
 External parts: Plastic (green)  
 Polish geometry: 8° angled (APC)

Dimensions Fiber/Cable	Order Number	
	Unterminated connector	Terminated assembly
9/125/900	- 000 - 001 L 000	- xxx - 001 L xxx
9/125/900/2100	- 000 - 002 L 000	- xxx - 002 L xxx
9/125/900/2500	- 000 - 003 L 000	- xxx - 003 L xxx
9/125/900/3000	- 000 - 004 L 000	- xxx - 004 L xxx
9/125/900/3500	- 000 - 005 L 000	- xxx - 005 L xxx

**COLOR CODING**

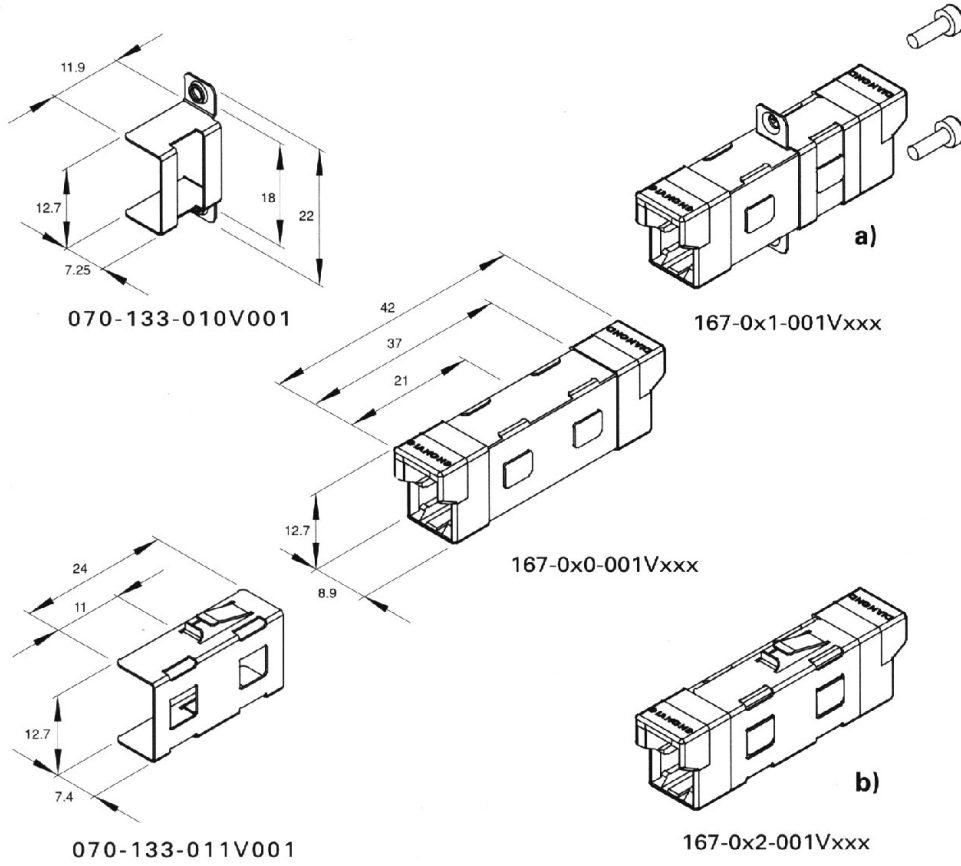
Thumb-latch	green	blue	black	red	orange	yellow	white	violet
Order No.	302	312	322	332	342	352	362	372

**MECHANICAL KEYING**

Thumb-latch No.	1 (red)	2 (brown)	3 (yellow)	4 (orange)	5 (violet)	6 (white)	—	—
Order No.	402	412	422	432	442	452	—	—

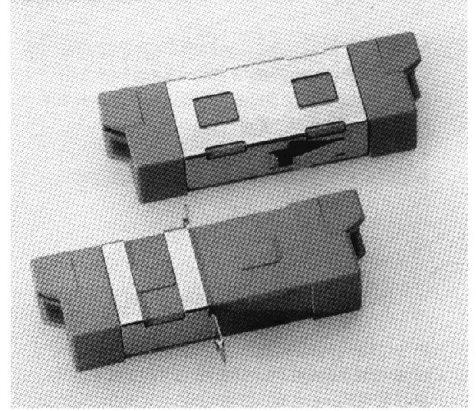
Connectors for other fiber and cable dimensions available upon request.

Type designation: **E-2201.2**  
 Mating sleeve: **Zirconia**  
 External parts: **Plastic blue (V1xx), green (V2xx)**

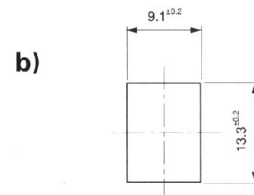
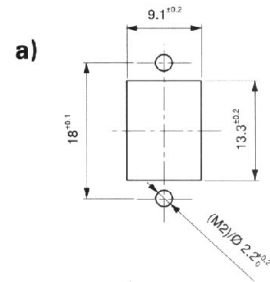


## MATING ADAPTER

### E-2000™ PC/APC



## MOUNTING INSTRUCTIONS



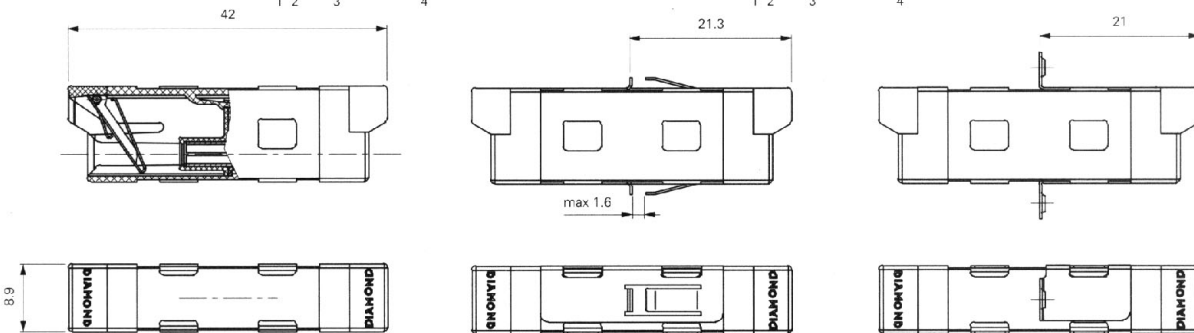
Max wall thickness 1,6 mm

## COLOR CODING

Frame color	Order Number	Frame color	Order Number
blue	167 - 0xx - 001 V x01	orange	167 - 0xx - 001 V x05
green	167 - 0xx - 001 V x02	yellow	167 - 0xx - 001 V x06
black	167 - 0xx - 001 V x03	white	167 - 0xx - 001 V x07
red	167 - 0xx - 001 V x04	violet	167 - 0xx - 001 V x08

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Frame no.	Order Number	Frame no.	Order Number
1 (red)	167 - 0xx - 101 V x00	4 (orange)	167 - 0xx - 401 V x00
2 (brown)	167 - 0xx - 201 V x00	5 (violet)	167 - 0xx - 501 V x00
3 (yellow)	167 - 0xx - 301 V x00	6 (white)	167 - 0xx - 601 V x00



## Order Number Codes for Mating Adapters

- 1 Adapter type: **0.15 dB: insert "0"**      **0.1 dB: insert "1"**
- 2 Code for fixation type:
  - 0 for basic body
  - 1 for assembled screw fixing clip
  - 2 for assembled quick fixing clip
- 3 Code for mechanical keying
- 4 Code for basic body color:
  - 1 for blue
  - 2 for green
- 5 Code for color coding

Other fixations or colors upon request.