

DIAMOND Fiber Optic Components

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.

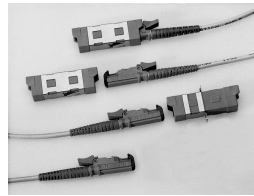
STANDARDS

- 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"
- ctc 222 Diamond internal Standard: "E-2000™ - 0.1 dB original"



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E-2000™ SINGLE MODE / MULTIMODE (CECC/IEC LSH) E-2106.6/E-2116.6 SINGLE MODE APC E-2108.6 (CECC/IEC LSH-HRL)



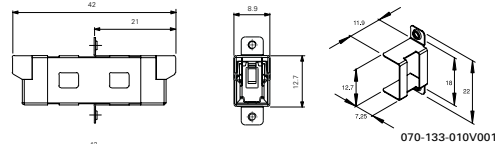
Type designation: **E-2201.2**
Mating sleeve: Zirconia
External parts: Plastic blue (V1xx), green (V2xx)

COLOR CODING

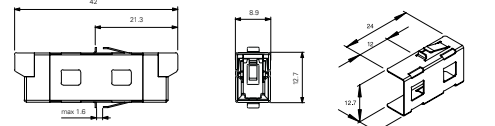
Frame color	Order Number	Frame color	Order Number
blue	1 6 7 - 0 x x - 0 0 1 V x 0 1	orange	1 6 7 - 0 x x - 0 0 1 V x 0 5
green	1 6 7 - 0 x x - 0 0 1 V x 0 2	yellow	1 6 7 - 0 x x - 0 0 1 V x 0 6
black	1 6 7 - 0 x x - 0 0 1 V x 0 3	white	1 6 7 - 0 x x - 0 0 1 V x 0 7
red	1 6 7 - 0 x x - 0 0 1 V x 0 4	violet	1 6 7 - 0 x x - 0 0 1 V x 0 8

MECHANISCHE CODIERUNG

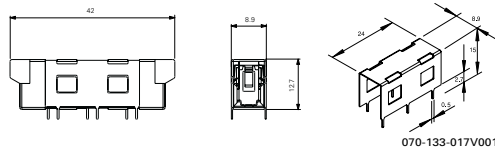
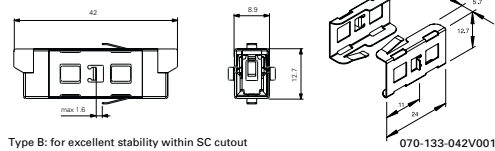
Frame no.	Order Number	Frame no.	Order Number
1 (red)	1 6 7 - 0 x x - 1 0 1 V x 0 0	4 (orange)	1 6 7 - 0 x x - 4 0 1 V x 0 0
2 (brown)	1 6 7 - 0 x x - 2 0 1 V x 0 0	5 (violet)	1 6 7 - 0 x x - 5 0 1 V x 0 0
3 (yellow)	1 6 7 - 0 x x - 3 0 1 V x 0 0	6 (white)	1 6 7 - 0 x x - 6 0 1 V x 0 0



Type A: for higher packaging density within E-2000™ cutout



Type B: for excellent stability within SC cutout

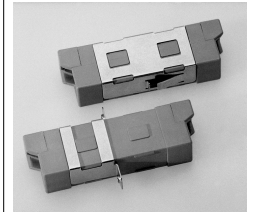


ORDER NUMBER CODES FOR MATING ADAPTERS

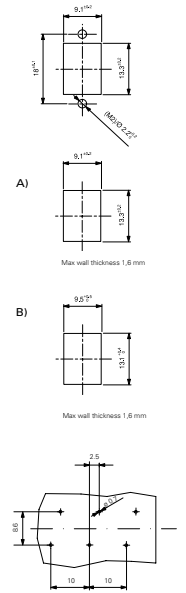
- ¹ Adapter type: **0.15 dB: insert "0"** **0.1 dB: insert "1"**
² Code for fixation type:
 - 0 for basic body - 1 for assembled screw fixing clip - 2 for assembled quick fixing clip (type A)
 - 4 for print fixation - 6 for assembled quick fixing clip (type B)
³ Code for mechanical keying
⁴ Code for basic body color:
 - 1 for blue - 2 for green
⁵ Code for color coding

Other fixations or colors upon request.

MATING ADAPTER E-2000™ PC/APC

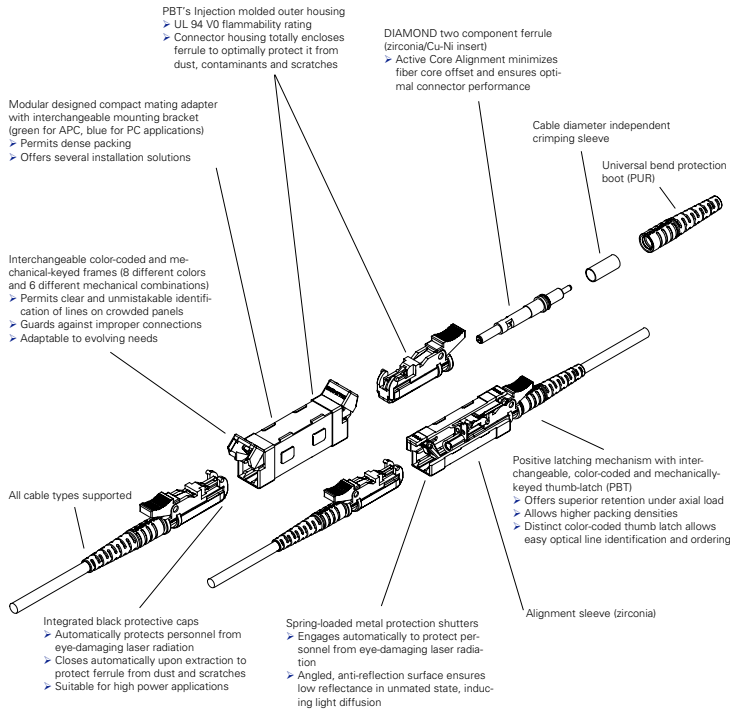


CUTOUT DIMENSIONS



Specifications subject to changes
without notice

002-037-21 (P)000683



SPECIFICATIONS

	Multimode	Single mode 0° PC	Single mode 8° APC	Single mode 8° 0.1 dB	Units	Test conditions
Insertion Loss (IL)	type 0.15 max 0.4	type 0.2 max 0.4	type 0.2 max 0.4	max 0.1	dB	IEC 61300-3-4; λ = 1300/1550nm
Return Loss (RL)	typ 40	min 50	min 70*	min 85*	dB	IEC 61300-3-6; λ = 1300/1550nm
Repeatability of IL	max ±0.1				dB	Over service life
Service life	1000 mate/demate cycles					
Operating temperature	-40 / +85 **				°C	
Storage temperature	-40 / +90 **				°C	

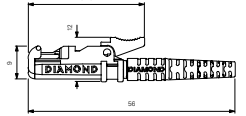
* Measured with high precision reflectometer.
 ** May be further limited by cable specifications.

ORDER INFORMATION FOR CONNECTORS

ORDER NUMBER CODES	
¹ Connector code	
² Connector code for termination on other end of assembly:	
- For pigtails	insert 000
- For patch assemblies	insert connector code for other connector
³ Code for fiber or cable	
⁴ Connector type:	max 0.4 dB: insert "L" max 0.1 dB: insert "H"
⁵ 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	300 - 000 - 001 L 000	300 - xxx - 001 L xxx
9/125/900/2100	300 - 000 - 002 L 000	300 - xxx - 002 L xxx
9/125/900/2500	300 - 000 - 003 L 000	300 - xxx - 003 L xxx
9/125/900/3000	300 - 000 - 004 L 000	300 - xxx - 004 L xxx
9/125/900/3500	300 - 000 - 005 L 000	300 - 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

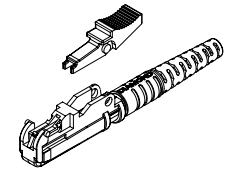
MECHANICAL KEYING

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	301 - 000 - 001 L 000	301 - xxx - 001 L xxx
50/125/900/2100	301 - 000 - 002 L 000	301 - xxx - 002 L xxx
50/125/900/2500	301 - 000 - 003 L 000	301 - xxx - 003 L xxx
50/125/900/3000	301 - 000 - 004 L 000	301 - xxx - 004 L xxx
50/125/900/3500	301 - 000 - 005 L 000	301 - xxx - 005 L xxx
62.5/125/900	301 - 000 - 001 L 000	301 - xxx - 011 L xxx
62.5/125/900/3000	301 - 000 - 004 L 000	301 - 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	302 - 000 - 001 L 000	302 - xxx - 001 L xxx
9/125/900/2100	302 - 000 - 002 L 000	302 - xxx - 002 L xxx
9/125/900/2500	302 - 000 - 003 L 000	302 - xxx - 003 L xxx
9/125/900/3000	302 - 000 - 004 L 000	302 - xxx - 004 L xxx
9/125/900/3500	302 - 000 - 005 L 000	302 - 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.