

# DIAMOND

## Fiber Optic Components

### Hybrid family

#### NETWORK ACCESSORIES

#### DESCRIPTION

In-line hybrid adapters are used to directly mate connectors with different mechanical interface. Their optical performance and compact size make a logical and cost-effective alternative to hybrid patch assemblies. They are available for SM PC/APC and MM PC connector types. Diamond offers three different hybrid families: Standard, E-2000™ and F-3000™.

#### SPECIFICATIONS FOR: STANDARD AND E-2000™ HYBRIDS

	MULTIMODE 0° PC	SINGLE MODE 0° PC	SINGLE MODE 8° APC	UNITS	TEST CONDITIONS
Insertion Loss (IL)*	typ. 0.15	typ. 0.2	typ. 0.2	dB	IEC 61300-3-4; $\lambda = 1300/1550\text{nm}$
Repeatability of IL	max $\pm 0.1$			dB	IEC 61300-2-2; $\lambda = 1300/1550\text{nm}$
Service life	1000 mate/demate cycles				According to field experience
Operating temperature	-40/+85			°C	
Storage temperature	-40/+90			°C	

\* IL measured using two reference cables

**NOTE** Optical and mechanical specifications are based on the use of the connector of corresponding standard; the above table reflects typical values.

#### SPECIFICATIONS FOR: F-3000™ HYBRIDS

	MULTIMODE 0° PC	SINGLE MODE 0° PC	SINGLE MODE 8° APC	UNITS	TEST CONDITIONS
Insertion Loss (IL)*	typ. 0.2	typ. 0.4	typ. 0.4**	dB	IEC 61300-3-4; $\lambda = 1300/1550\text{nm}$
Repeatability IL	$\pm 0.1$	$\pm 0.2$	$\pm 0.2$	dB	IEC 61300-2-2; $\lambda = 1300/1550\text{nm}$
Service life	1000 mate/demate cycles				According to field experience
Operating temperature	-40/+85			°C	
Storage temperature	-40/+90			°C	

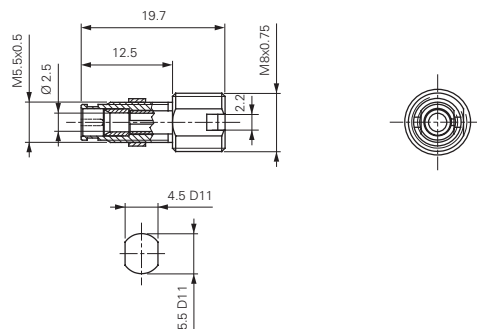
\* IL measured using two reference cables

\*\* Additional IL of 0.2 dB may be observed using SC version

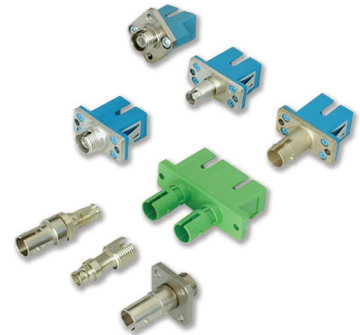
#### STANDARD HYBRIDS TYPES AND DIMENSIONS

##### HYB. LSA (DIN) / FC (key 2.2 mm)

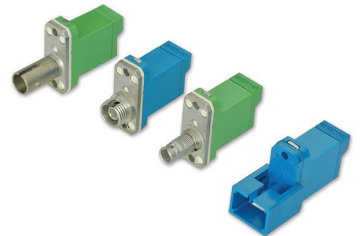
External parts: Cu-Ni alloy  
Mating sleeve: Zirconia



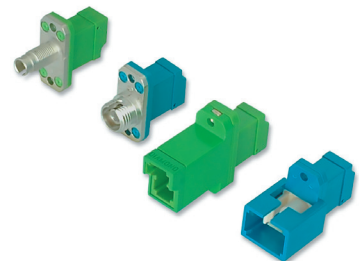
SINGLE MODE PC/APC  
MULTIMODE PC



Standard hybrid adapters



E-2000™ hybrid adapters



F-3000™ hybrid adapters



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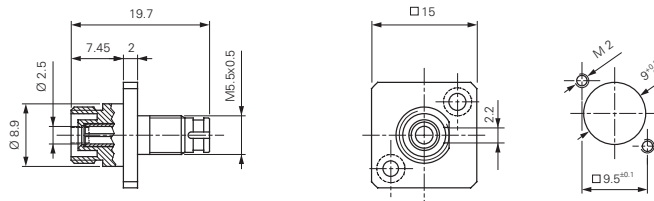
[www.diamond-fo.com](http://www.diamond-fo.com)

Specifications subject to change  
without notice

BDD 1951821\_01\_18

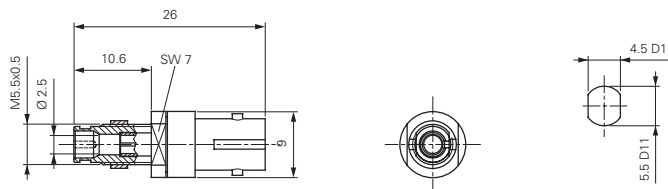
**HYB. FC (key 2.2 mm) / LSA (DIN)**

External parts: Cu-Ni alloy



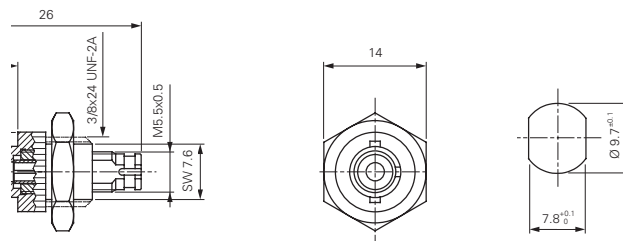
**HYB. LSA (DIN) / ST™**

External parts: Cu-Ni alloy/Ni-plated Zamak



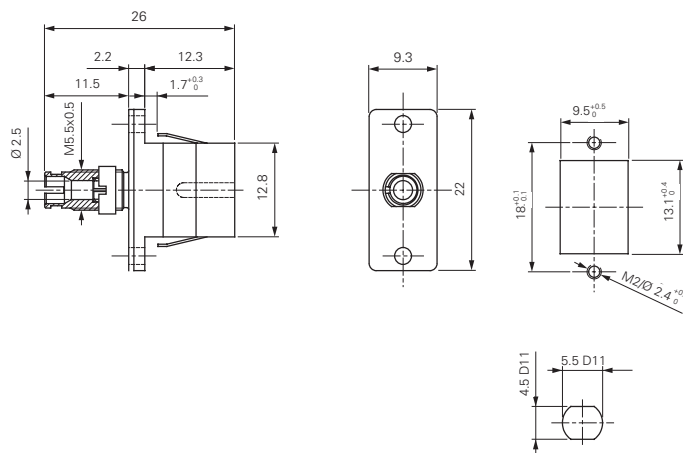
**HYB. ST™ / LSA (DIN)**

External parts: Ni-plated Zamak/Cu-Ni alloy



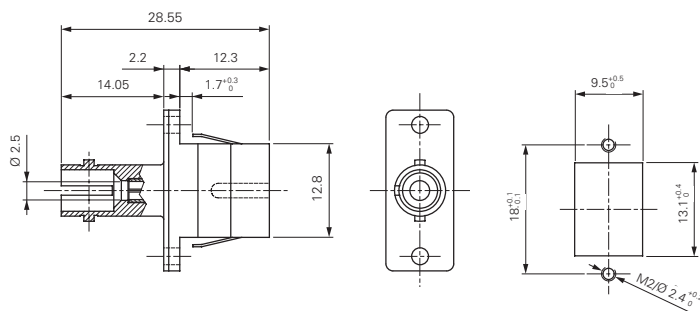
**HYB. LSA (DIN) / SC**

External parts: Ni-plated Zamak/Plastic



**HYB. SC / ST™**

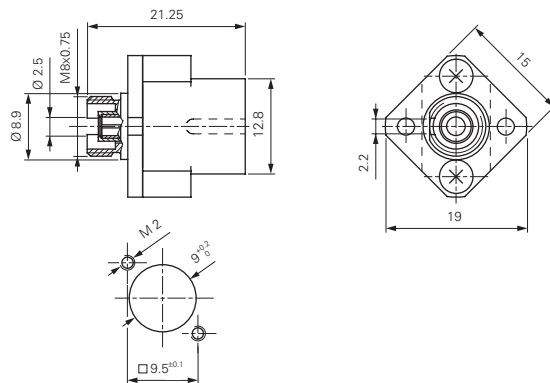
External parts: Cu-Ni alloy/Plastic



**HYB. FC (key Ø 2.2 mm) / SC, Square**

Available types: **HYB. FC/SC MM PC Square**  
**HYB. FC/SC SM PC Square**  
**HYB. FC/SC SM APC Square**

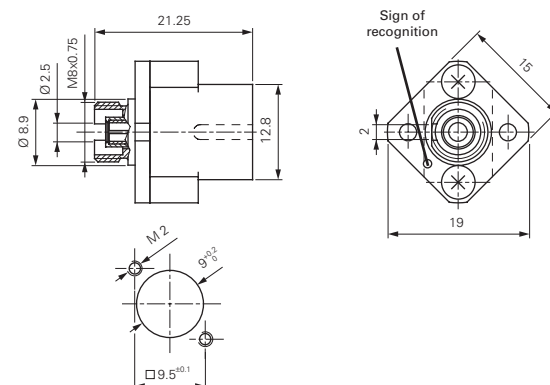
External parts: Ni-plated Brass/Plastic  
 key ø: 2.2 mm



**HYB. FC (key Ø 2 mm) / SC, Square**

Available types: **HYB. FC/SC SM APC Square**

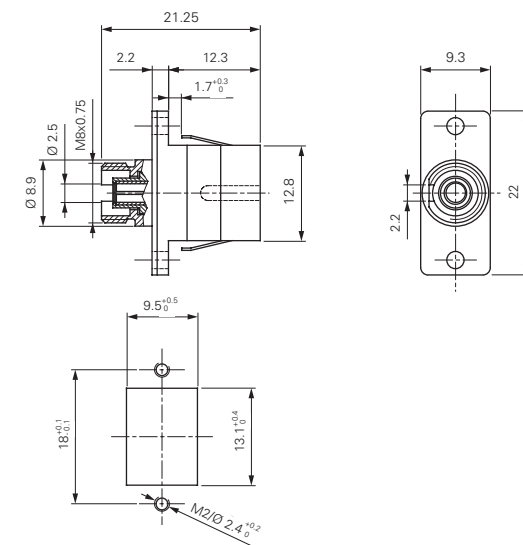
External parts: Ni-plated Brass/Plastic  
 key ø: 2 mm



**HYB. SC / FC (key Ø 2.2 mm)**

Available types: **HYB. SC/FC MM PC**  
**HYB. SC/FC SM PC**  
**HYB. SC/FC SM APC**

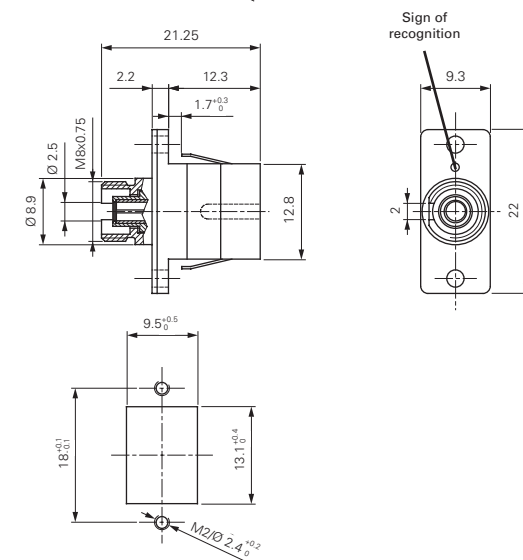
External parts: Ni-plated Zamak/Plastic  
 key ø: 2.2 mm



**HYB. SC / FC (key Ø 2 mm)**

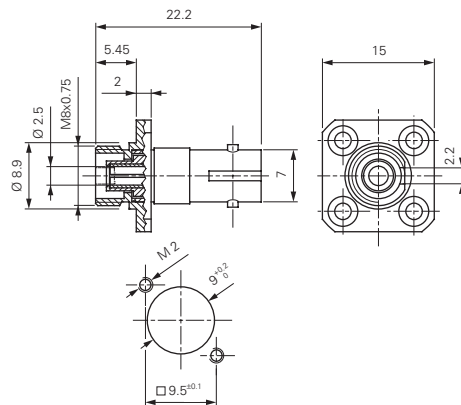
Available types: **HYB. FC/SC SM APC**

External parts: Ni-plated Zamak/Plastic  
 key ø: 2 mm



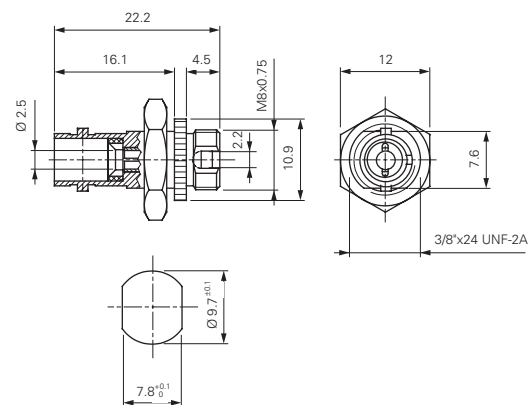
**HYB. FC (key 2.2 mm) / ST™, Square**

External parts: Ni-plated Brass/Ni-plated Zamak



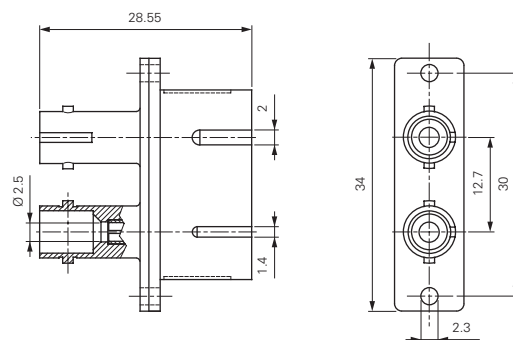
**HYB. ST™ / FC (key 2.2 mm)**

External parts: Cu-Ni alloy



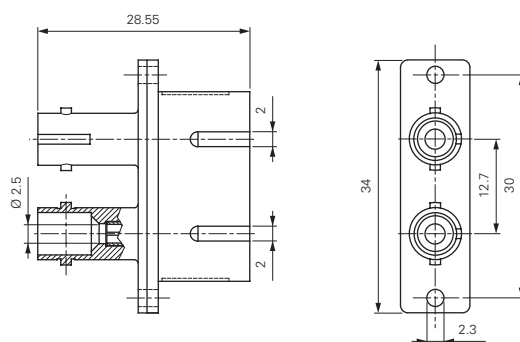
**HYB. SC / ST™ Duplex (for SM PC version)**

External parts: Plastic

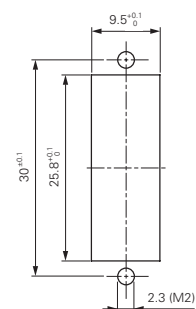


**HYB. SC / ST™ Duplex (for MM version)**

External parts: Plastic



CUTOUT DIMENSIONS



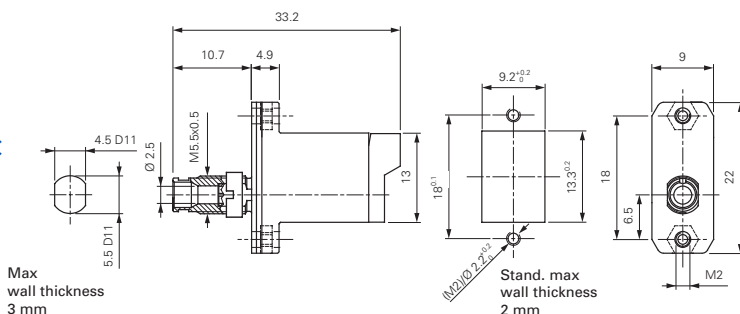
NOTE Standard plastic body colors: beige for MM PC, blue for SM PC and green for SM APC.

E-2000™ HYBRIDS TYPES AND DIMENSIONS

HYB. E-2000™/LSA (DIN)

Available types: **HYB. E-2000™/LSA (DIN) MM PC**  
**HYB. E-2000™/LSA (DIN) SM PC**  
**HYB. E-2000™/LSA (DIN) SM APC**

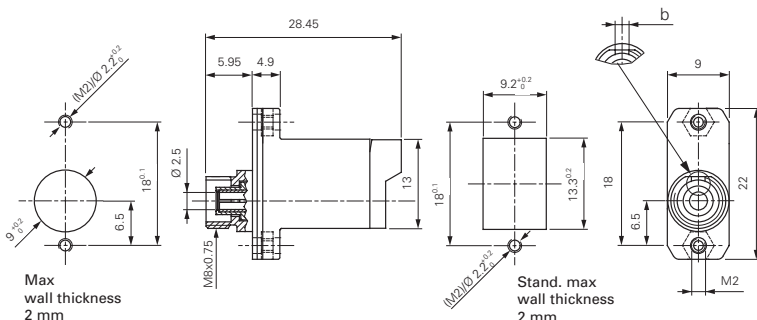
External parts: Ni-plated Zamak/Plastic



HYB. E-2000™/FC

Available types: **HYB. E-2000™/FC MM PC**  
**HYB. E-2000™/FC SM PC**  
**HYB. E-2000™/FC SM APC**

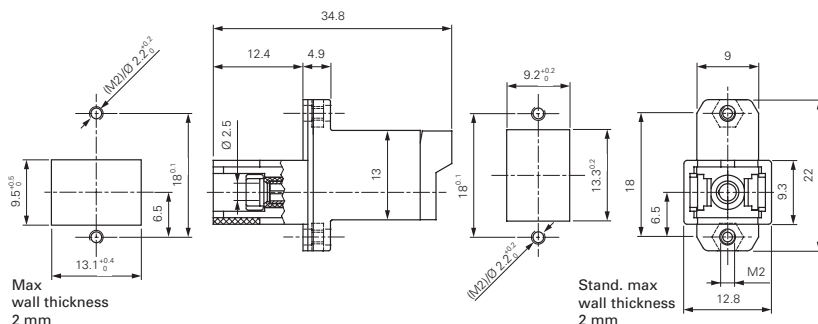
External parts: Ni-plated Zamak/Plastic  
 Dimension b: 2 or 2.2 mm for APC,  
 only 2.2 mm for PC



HYB. E-2000™/SC

Available types: **HYB. E-2000™/SC MM PC**  
**HYB. E-2000™/SC SM PC**  
**HYB. E-2000™/SC SM APC**

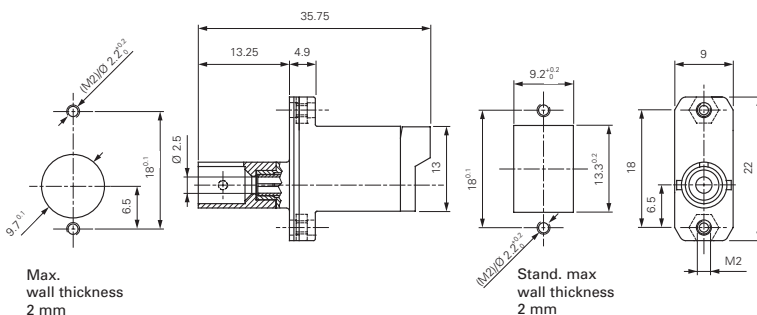
External parts: Plastic



HYB. E-2000™/ST™

Available types: **HYB. E-2000™/ST™ MM PC**  
**HYB. E-2000™/ST™ SM PC**

External parts: Ni-plated Zamak/Plastic  
 Dimension b: 2 or 2.2 mm for APC,  
 only 2.2 mm for PC



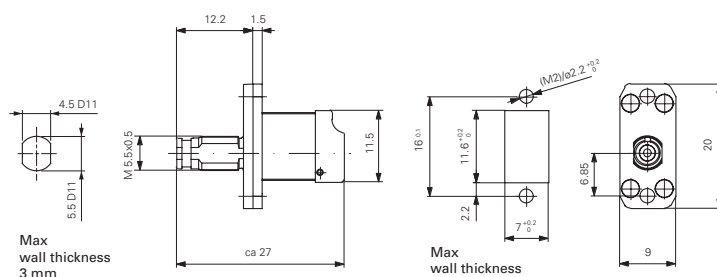
NOTES - Standard body and frame colors: beige for MM PC, blue for SM PC and green for SM APC.  
 - Other frame colors or frames with mechanical keying are available upon request. (Please refer to the part-specific color and mechanical keying of E-2000™ Simplex datasheet).

## F-3000™ HYBRIDS TYPES AND DIMENSION

### HYB. F-3000™/LSA (DIN)

Available types: **HYB. F-3000™/LSA (DIN) MM PC**  
**HYB. F-3000™/LSA (DIN) SM PC**  
**HYB. F-3000™/LSA (DIN) SM APC**

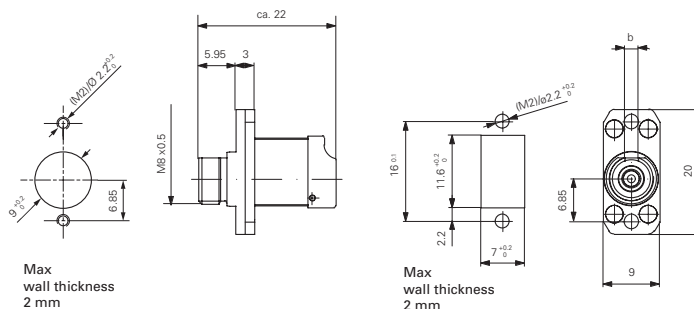
External parts: Ni-plated Zamak/Plastic



### HYB. F-3000™/FC

Available types: **HYB. F-3000™/FC MM PC**  
**HYB. F-3000™/FC SM PC**  
**HYB. F-3000™/FC SM APC**

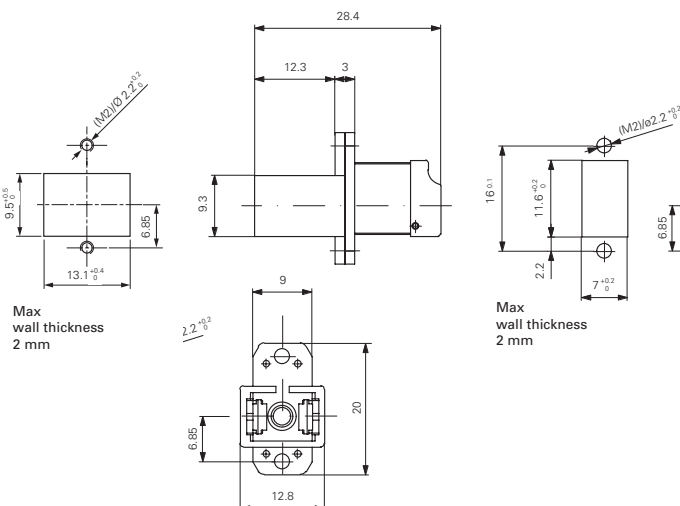
External parts: Ni-plated Zamak/Plastic  
 Dimension b: 2 or 2.2 mm for APC,  
 only 2.2 mm for PC



### HYB. F-3000™/SC

Available types: **HYB. F-3000™/SC MM PC**  
**HYB. F-3000™/SC SM PC**  
**HYB. F-3000™/SC SM APC**

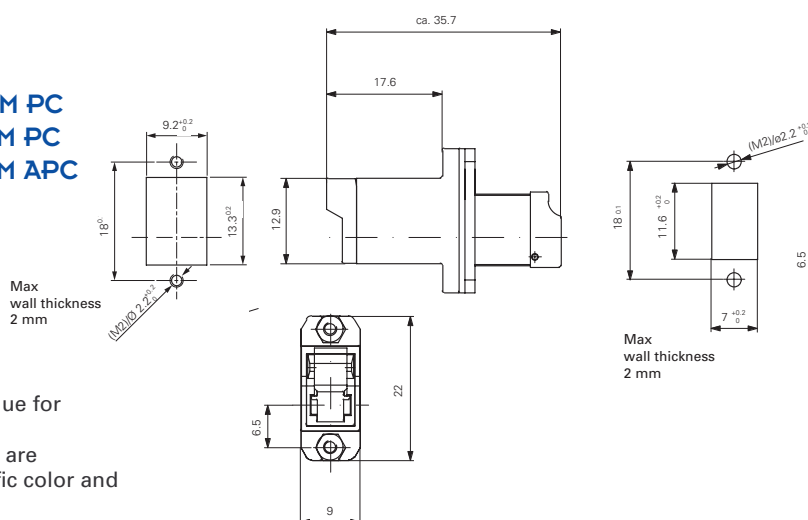
External parts: Plastic



### HYB. F-3000™/LSH (E-2000™)

Available types: **HYB. F-3000™/LSH (E-2000™) MM PC**  
**HYB. F-3000™/LSH (E-2000™) SM PC**  
**HYB. F-3000™/LSH (E-2000™) SM APC**

External parts: Plastic



**NOTES** - Standard body and frame colors: beige for MM PC, blue for SM PC and green for SM APC.  
 - Other frame colors or frames with mechanical keying are available upon request. Please refer to the part-specific color and mechanical keying of E-2000™ Simplex datasheet.

## ORDER INFORMATION

Please refer to the part numbers provided in the separate P/N list.

For other configurations, please contact your nearest local Diamond representative or fill in the contact form available on the [www.diamond-fo.com](http://www.diamond-fo.com) website.

Other versions upon request.