

# 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; λ = 1300/1550nm |
| Repeatability of IL   | max ±0.1                |                   |                    | dB    | IEC 61300-2-2; λ = 1300/1550nm |
| 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

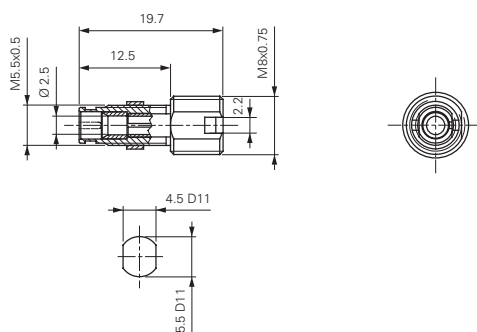
|                       | MULTIMODE 0° PC        | SINGLE MODE 0° PC | SINGLE MODE 8° APC | UNITS | TEST CONDITIONS                |
|-----------------------|------------------------|-------------------|--------------------|-------|--------------------------------|
| Insertion Loss (IL)*  | typ. 0.2               | typ. 0.4          | typ. 0.4           | dB    | IEC 61300-3-4; λ = 1300/1550nm |
| Repeatability IL      | ± 0.1                  | ± 0.2             | ± 0.2              | dB    | IEC 61300-2-2; λ = 1300/1550nm |
| Service life          | 500 mate/demate cycles |                   |                    |       | According to field experience  |
| Operating temperature | -40/+85                |                   |                    | °C    |                                |
| Storage temperature   | -40/+90                |                   |                    | °C    |                                |

\* IL measured using two reference cables at room temperature

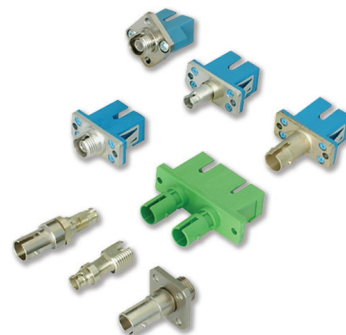
#### STANDARD HYBRIDS TYPES AND DIMENSIONS

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

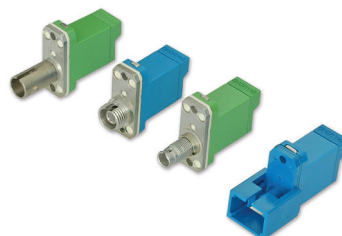
External parts: Cu-Ni alloy  
Mating sleeve: Zirconia



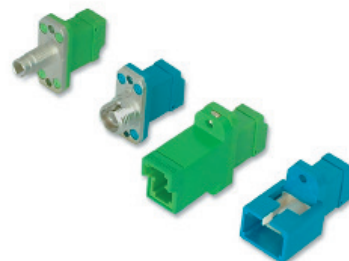
SINGLE MODE PC/APC  
MULTIMODE PC



Standard hybrid adapters



E-2000® hybrid adapters



F-3000® hybrid adapters



DIAMOND SA | Via dei Patrizi 5 | CH-6616 Losone - Switzerland  
Tel. +41 58 307 45 45 | e-mail info@diamond-fo.com

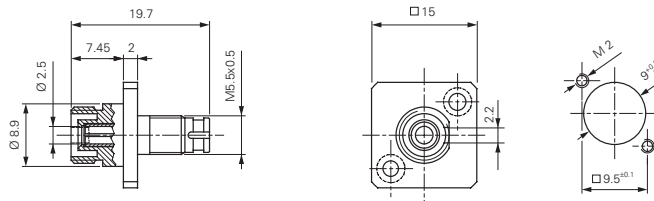
[www.diamond-fo.com](http://www.diamond-fo.com)

Specifications subject to change  
without notice

BDD 1951821 08\_20

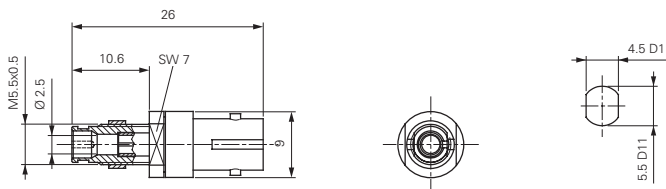
**HYB. FC (key 2.2 mm) / LSA (DIN)**

External parts: Cu-Ni alloy



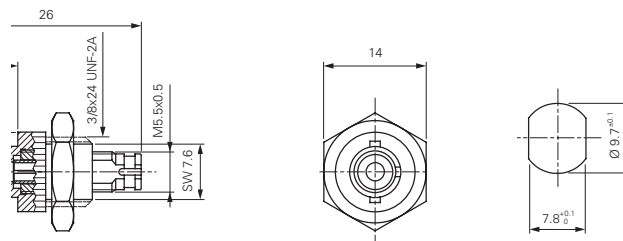
**HYB. LSA (DIN) / ST™**

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



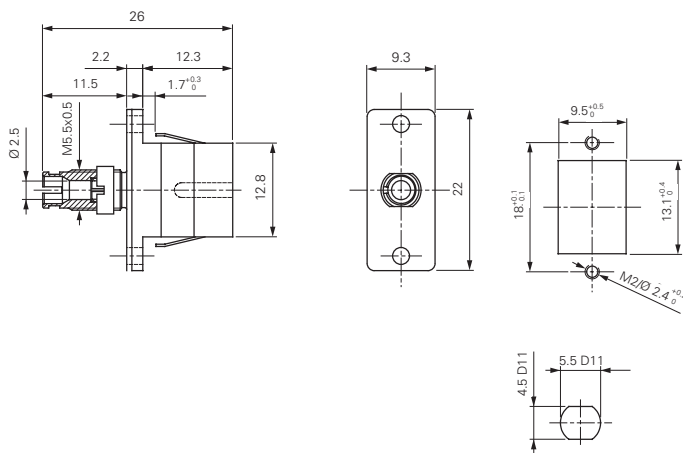
**HYB. ST™ / LSA (DIN)**

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



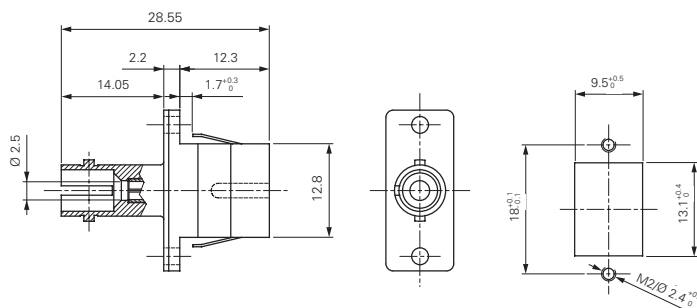
**HYB. LSA (DIN) / SC**

External parts: Ni-plated Zamak/Plastic



**HYB. SC / ST™**

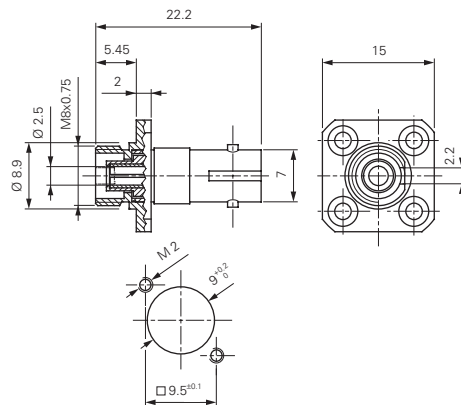
External parts: Cu-Ni alloy/Plastic





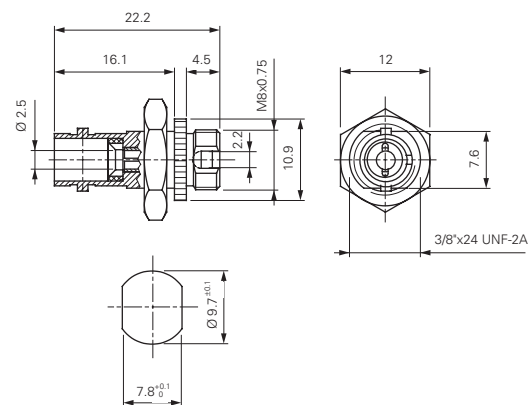
**HYB. FC (key 2.2 mm) / ST™, Square**

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



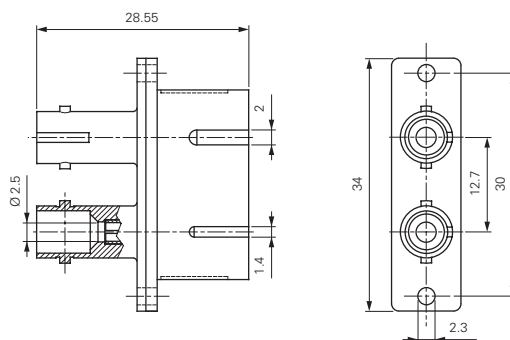
**HYB. ST™ / FC (key 2.2 mm)**

External parts: Cu-Ni alloy



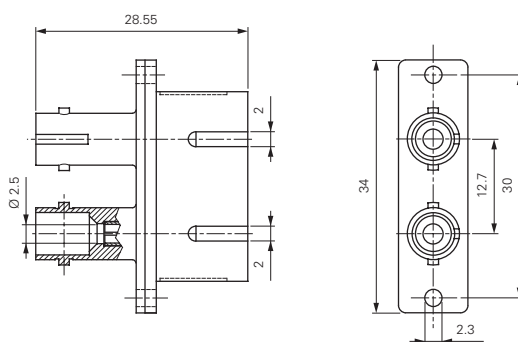
**HYB. SC / ST™ Duplex (for SM PC version)**

External parts: Plastic

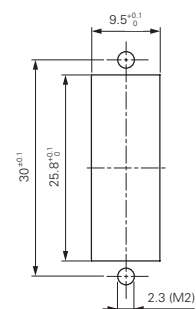


**HYB. SC / ST™ Duplex (for MM version)**

External parts: Plastic



**CUTOUT DIMENSIONS**



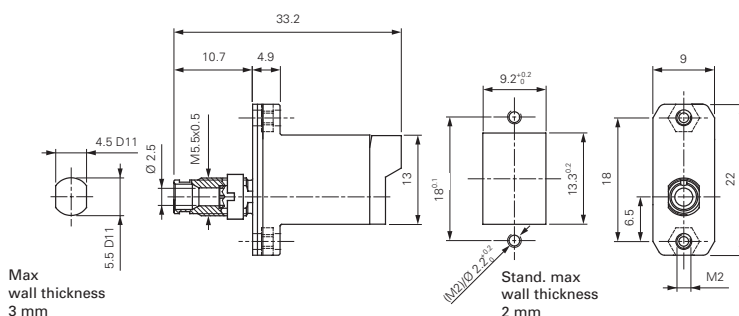
**NOTE** Standard plastic body colors: beige for MM PC, blue for SM PC and green for SM APC.

## 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**

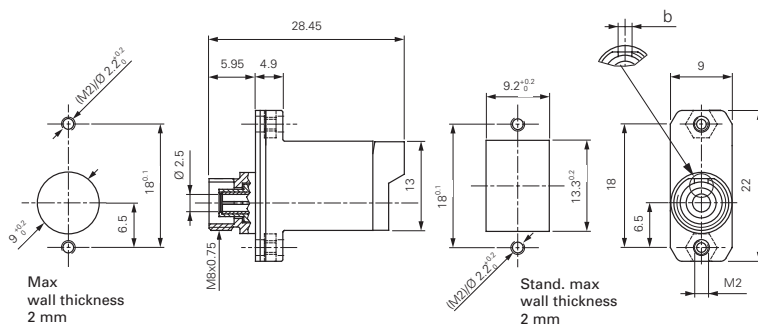
External parts: Ni-plated Zamak/Plastic



## HYB. E-2000®/FC

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

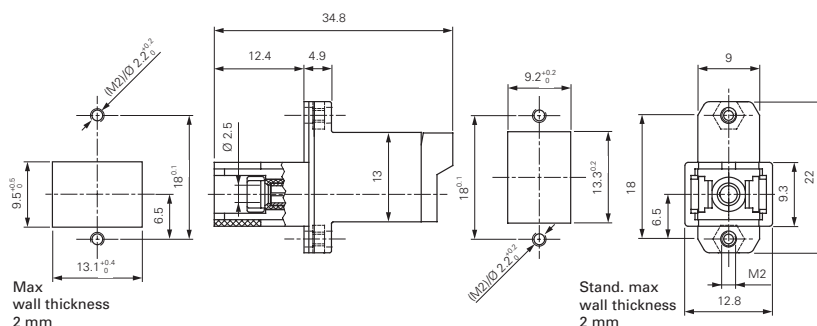
External parts: Ni-plated Zamak/Plastic  
 Dimension b: 2 or 2.2 mm for APC,  
 only 2.2 mm for PC



## HYB. E-2000®/SC

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

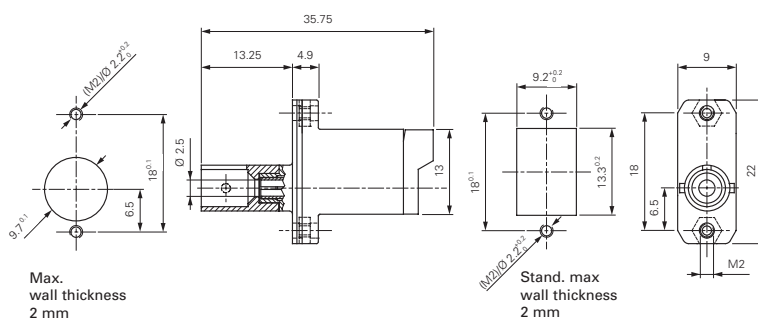
External parts: Plastic



## 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



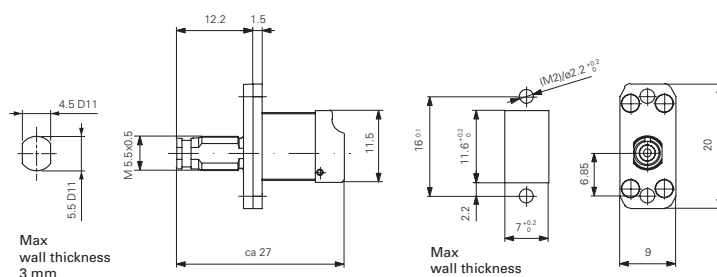
**NOTES** - Standard body and frame colors: beige for MM PC, blue for SM PC and green for SM APC.  
 - Other frame colors or frames with mechanical keying are available upon request. (Please refer to the part-specific color and mechanical keying of E-2000® Simplex datasheet).

## 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**

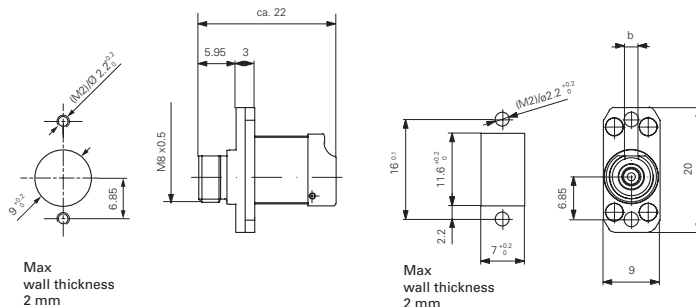
External parts: Ni-plated Zamak/Plastic



## HYB. F-3000®/FC

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

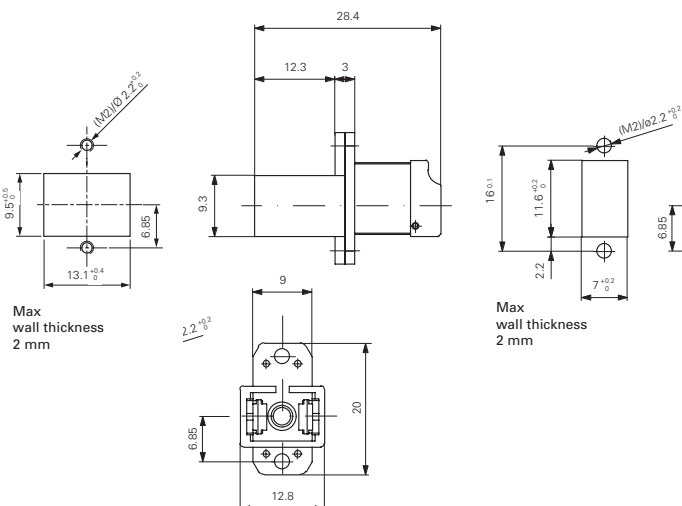
External parts: Ni-plated Zamak/Plastic  
 Dimension b: 2 or 2.2 mm for APC,  
 only 2.2 mm for PC



## HYB. F-3000®/SC

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

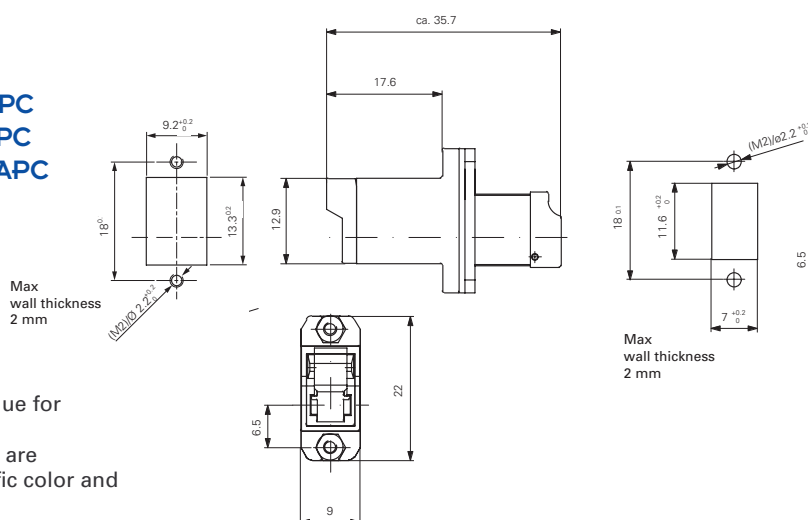
External parts: Plastic



## 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.