

# DIAMOND

## Fiber Optic Components

### CABLE ASSEMBLIES AND ADAPTERS

Unlike conventional ferrules, the Diamond lensed ferrule operates on the Expanded Beam principle. Setting new standards in terms of optical performance by using Single mode and Multi mode fibers, lensed ferrules are used for applications that were not suitable, until now, because of high optical requirements.

#### XB lensed ferrule

##### FEATURES

- ▶ High precision ferrule
- ▶ Single mode and Multi mode fiber
- ▶ Low insertion Loss
- ▶ Similar RL to standard contact connectors
- ▶ High power reliability

#### E-2000® XB connector

##### FEATURES

- ▶ Contactless connection
- ▶ 900um Fiber to 3mm Cable
- ▶ Easy Cleaning
- ▶ Mating durability: 500 cycling
- ▶ Max 3W at 1550nm
- ▶ Field repair
- ▶ Color-coding and mechanical keying to ensure correct matings

##### STANDARDS

- ▶ Performance standard IEC 61753-1
- ▶ RoHS compliant
- ▶ Reach

### E-2000® XB

#### Compact Lensed Ferrule Technology



Lensed ferrule



E-2000® XB connector



E-2000® XB adapter



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*Specifications subject to change without notice*

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## OPTICAL SPECIFICATIONS

MEASUREMENT / TEST	METHOD	VALUES SINGLE MODE	VALUES MULTI MODE
Insertion loss, random mated	IEC 61300-3-34	IL max. 1 dB	IL max 1dB
Return loss	IEC 61300-3-6	RL min. 35 dB	RL min. 25 dB

## MECHANICAL AND ENVIRONMENTAL CONDITIONS

MEASUREMENT / TEST	METHOD	VALUES
Change of temperature (Reliability)	IEC 61300-2-22	-40°C / +85°C / 1 h dwell / 500 cycles
Cold	IEC 61300-2-17	40°C / 96 h
Dry heat (Reliability)	IEC 61300-2-18	+85°C / 96 h
Damp heat, cyclic	IEC 61300-2-46	+25°C / +55°C / 95% r.h. / 144 h
Fibre retention	IEC 61300-2-4	5 N / 1 min
Vibration, sinusoidal	IEC 61300-2-1	10 Hz - 55 Hz / 90 min
Mating durability	IEC 61300-2-2	500 cycles
Optical power cycling	IEC 61300-2-14	3 W

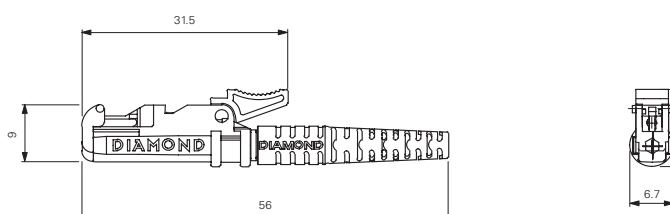
## DRAWINGS AND DIMENSIONS

### E-2000® XB SIMPLEX AND COMPACT CONNECTORS

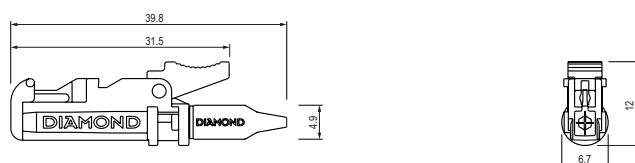
E-2000® XB Simplex connectors 900µm - 3mm boot style

Ferrule material: Zirconia/Lense

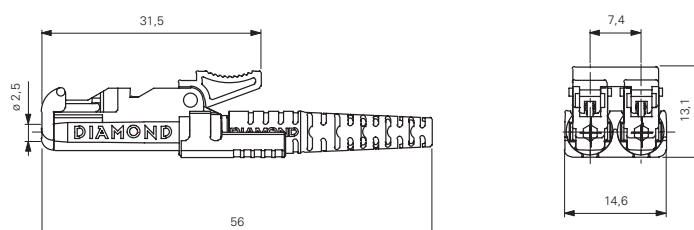
External parts: Plastic



E-2000® XB Simplex connectors 900µm short boot

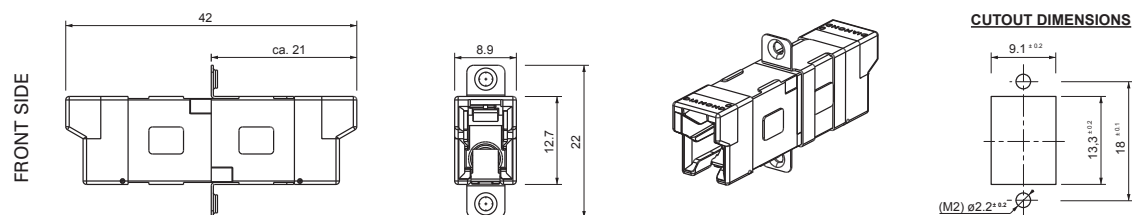
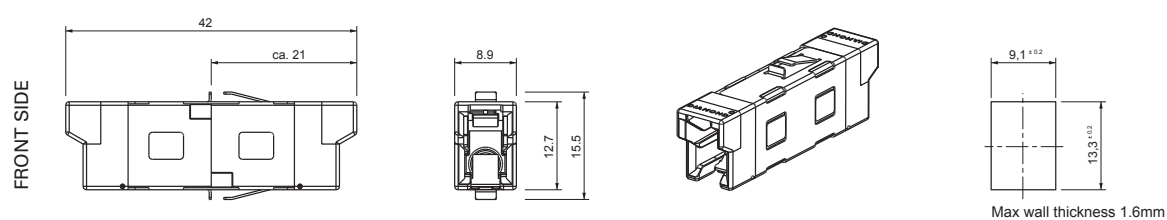
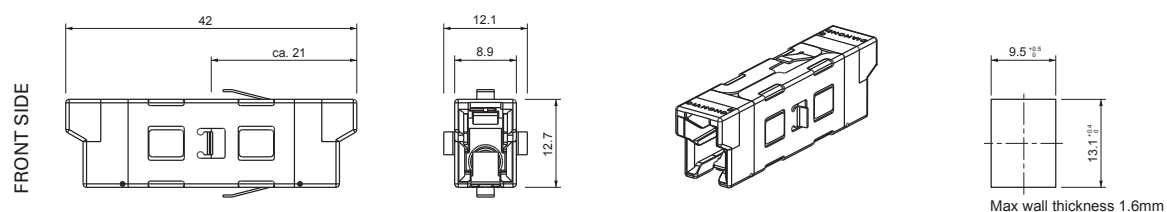


E-2000® XB Compact connectors 900µm - 3mm boot styles

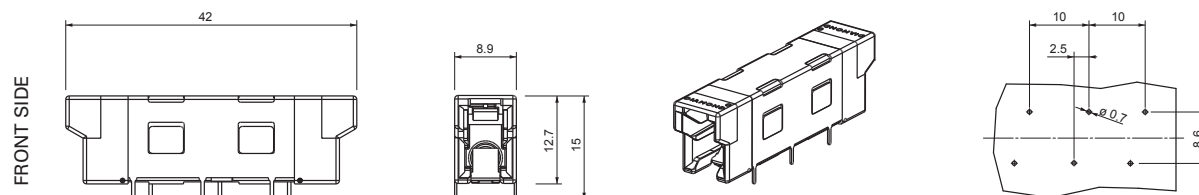


## E-2000® XB SIMPLEX ADAPTERS

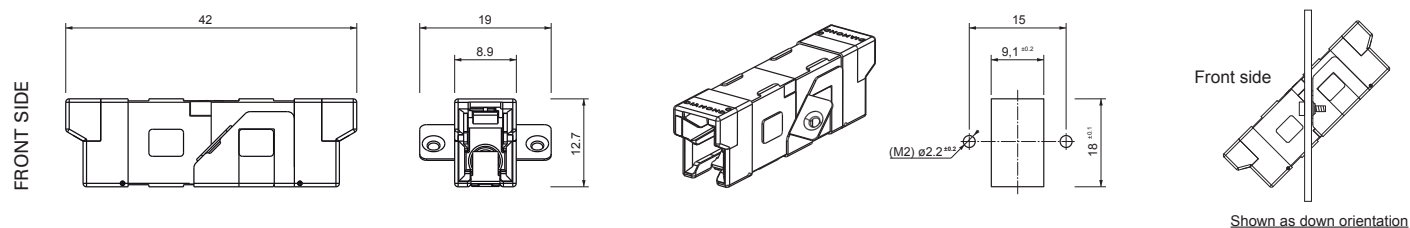
## E-2000® XB Simplex mating adapter with screw fixing clip

E-2000® XB Simplex mating adapter with quick fixing clip  
(Typ A: for higher packaging density within E-2000® cutout)E-2000® XB Simplex mating adapter with quick fixing clip  
(Typ B: for excellent stability within SC cutout)

## E-2000® XB Simplex mating adapter with print fixing clip

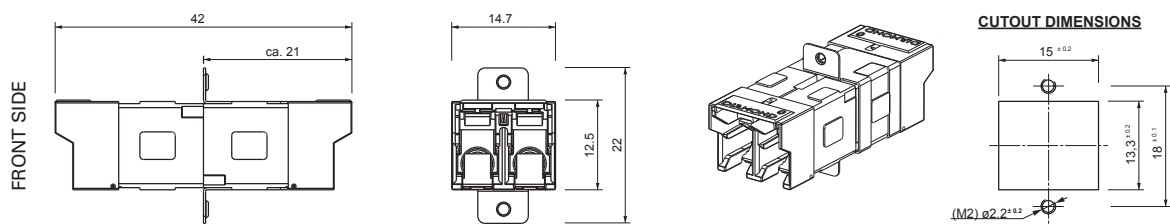


## E-2000® XB Simplex mating adapter with 45° screw fixing clip

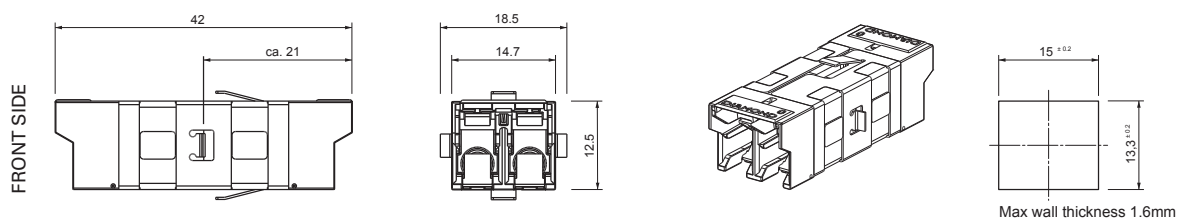


## E-2000® XB COMPACT ADAPTERS

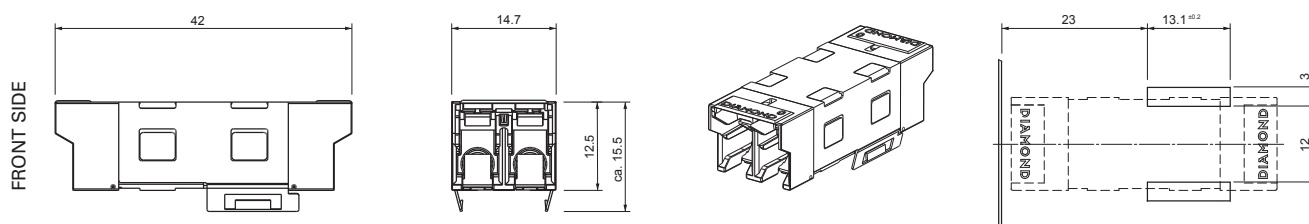
## E-2000® XB Compact mating adapter with screw fixing clip



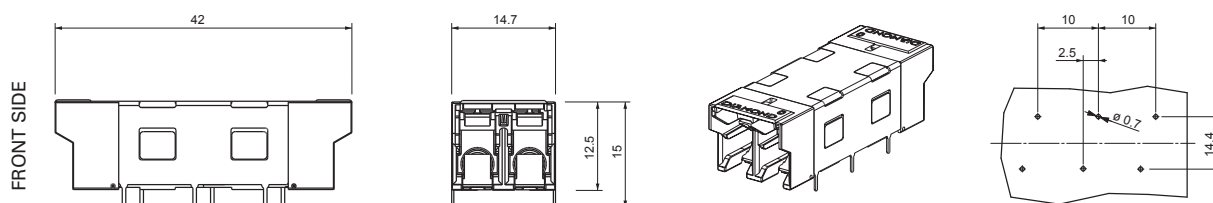
## E-2000® XB Compact mating adapter with quick fixing clips



## E-2000® XB Compact mating adapter with print fixing clip (snap closure)



## E-2000® XB Compact mating adapter with print fixing clip (6 pins)



## E-2000® XB Compact mating adapter with 45° screw fixing clip

