

# 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 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 fiber 9µm
- ▶ Low insertion Loss
- ▶ Similar RL to standard contact connectors
- ▶ High power reliability

#### **E-2000® XB connector**

##### **FEATURES**

- ▶ Contactless connection
- ▶ 900µm Fiber to 3mm Cable
- ▶ Easy Cleaning
- ▶ Mating durability: 500 cycling
- ▶ Max 3W at 1550nm
- ▶ Field repair

##### **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
Insertion loss, random mated	IEC 61300-3-34	IL type 0.6 dB max 1 dB
Return loss	IEC 61300-3-6	RL min. 35 dB

## MECHANICAL AND ENVIRONMENTAL CONDITIONS

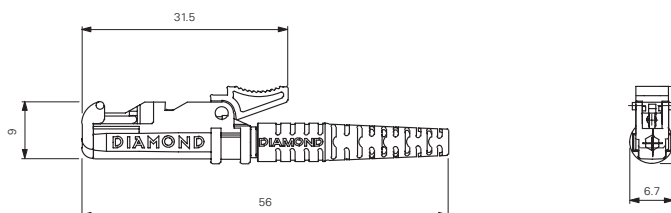
MEASUREMENT / TEST	METHOD	VALUES
Change of temperature (Reliability)	IEC 61300-2-22	-40°C / +85°C / 1 h dwell / 500 cycles
Cold	IEC 61300-2-17	40°C / 96 h
Dry heat (Reliability)	IEC 61300-2-18	+85°C / 96 h
Damp heat, cyclic	IEC 61300-2-46	+25°C / +55°C / 95% r.h. / 144 h
Fibre retention	IEC 61300-2-4	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

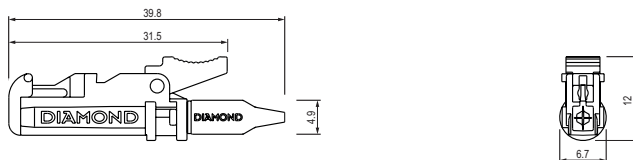
### E-2000® XB SIMPLEX AND COMPACT CONNECTORS

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

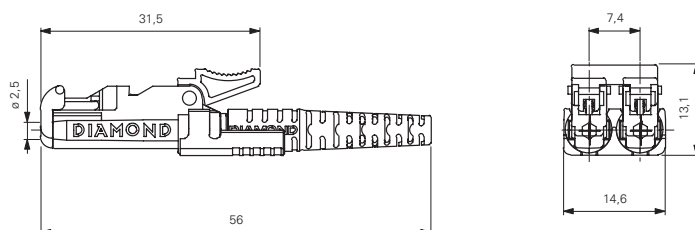
Ferrule material: Zirconia/Lense  
External parts: Plastic



#### E-2000® XB Simplex connectors 900µm short boot

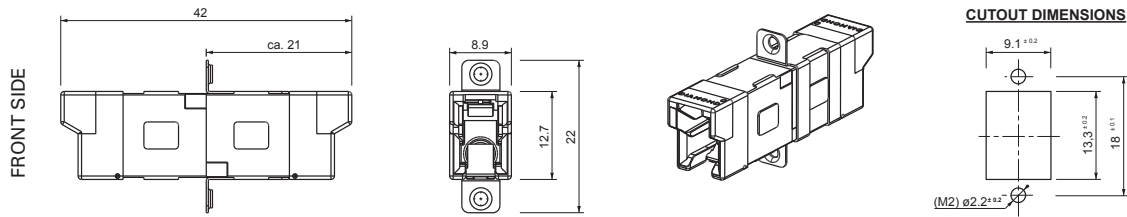
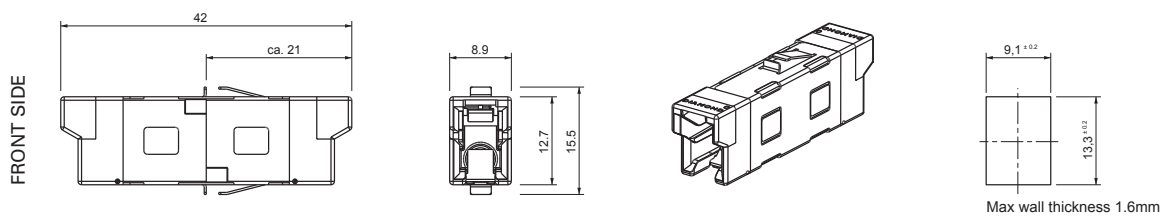
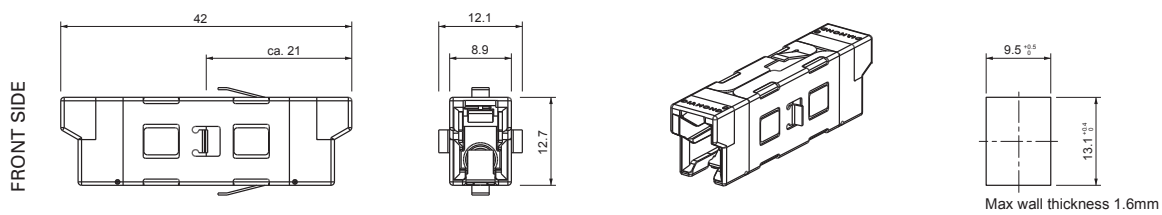


#### E-2000® XB Compact connectors 900µm - 3mm boot styles

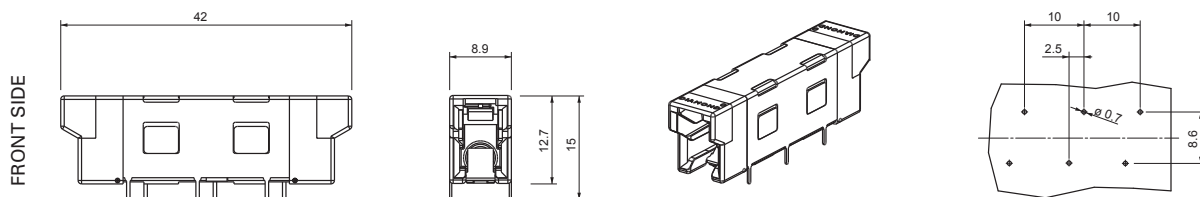


## E-2000® XB SIMPLEX ADAPTERS

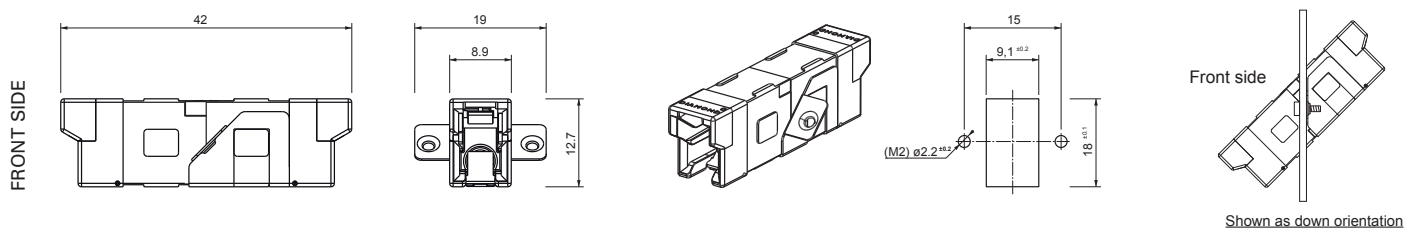
## E-2000® XB Simplex mating adapter with screw fixing clip

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

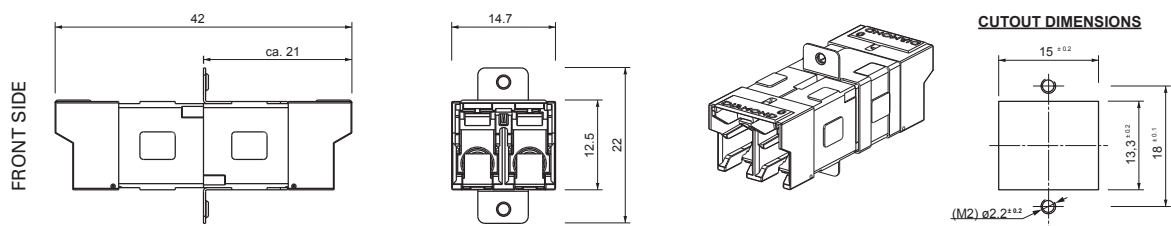


## E-2000® XB Simplex mating adapter with 45° screw fixing clip

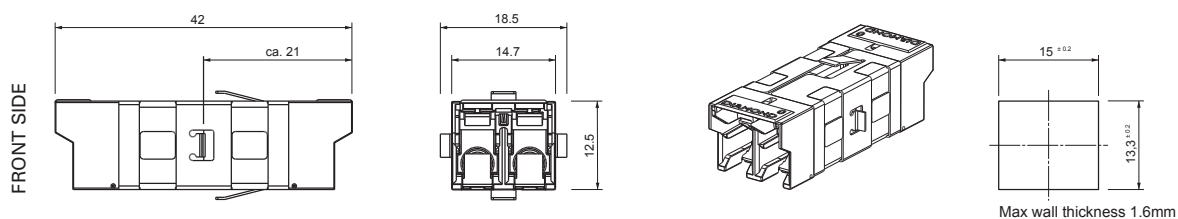


## E-2000® XB COMPACT ADAPTERS

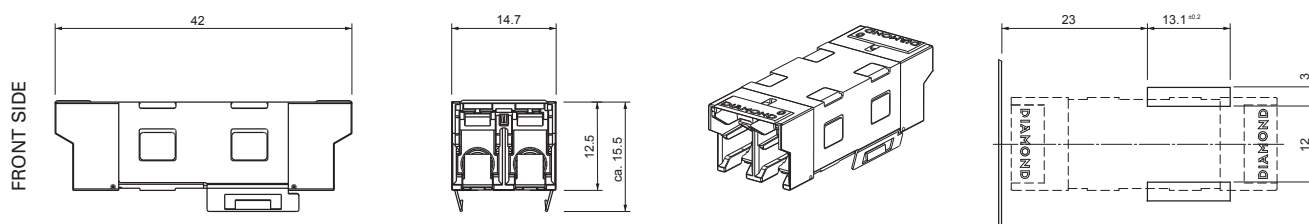
## E-2000® XB Compact mating adapter with screw fixing clip



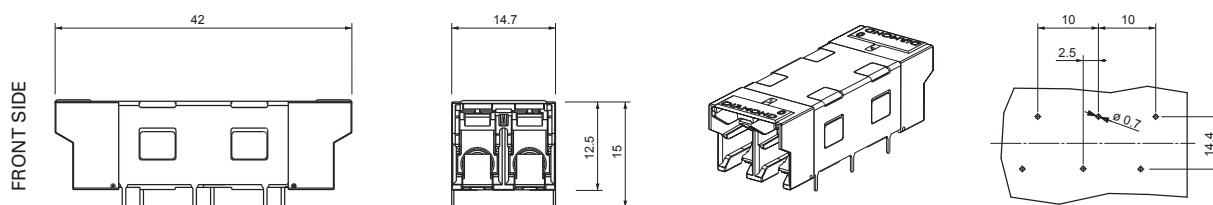
## E-2000® XB Compact mating adapter with quick fixing clips



## 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

