## DIAMOND Fiber Optic Components

#### **NETWORK ACCESSORIES**

#### **DESCRIPTION**

Optical Sacrificial Interfaces are compact, in-line, male-to-female components, especially used in laboratory and field test equipment to protect front panel connector end-faces from the damage and contamination of repeated mating and de-mating. The use of sacrificial interfaces avoids costly instrument re-calibration that usually requires the equipment to be returned to the manufacturer or specialized service centers and eliminates equipment down time. The sacrificial interface can be connected on the front of the panel instrument to facilitate user access (Fig. 1), or inside it (Fig. 2) for instrument manufactures who prefer to provide service and maintenance themselves. Diamond Sacrificial Interfaces are available for MM and SM fibers, with different end-face geometries: PC/PC, APC/APC, to a wide range of international connector standards.

The ACA (Active Core Alignment) technology used in the Diamond Sacrificial Interfaces ensures minimal additional insertion loss and back reflections combined with exceptional repeatability due to the ultra-high tolerance Titanium interfaces. UGTs Optical Transition Adapters (male/female) are also space saving in-line components, mainly deployed to connect different connector geometries, (eg. from 0° PC connectors to 8° angle-polished APC connector or the reverse).

#### Ferrule type

Standard ø2.5mm, 1.25mm Zirconia/metal insert. Except for ST™ ø2.5mm tungsten carbide.

#### **SPECIFICATIONS**

	SM G. 652D	ММ	UNITS	TEST CONDITIONS
Insertion Loss (IL)*	max 0.7 dB	max 0.7 dB	dB	IEC 61300-3-4; λ = 1300/1550nm SM - 850/1300nm MM
Return Loss (RL)	PC min 45 / APC min 70**	min 35 dB	dB	IEC 61300-3-6; $\lambda$ = 1300/1550nm SM - 850/1300nm MM
Repeatability of IL	max ±0.3 (DiaLink max ±0.1)		dB	IEC 61300-2-2; $\lambda$ = 1300/1550nm SM - 850/1300nm MM
Service life	500 mate/demate cycles			
Operating temperature	-40/+85		°C	
Storage temperature	-40/+90		°C	

\* Total Insertion Loss. Additional IL due to modal noise max 0.5 dB

\*\* Measured with high resolution reflectometer HP

Other fibers available upon request

#### TYPES AND DIMENSIONS

#### E-2000™

Available UGT E-2000<sup>™</sup> APC/PC SM types: UGT E-2000<sup>™</sup> PC/APC SM

SI E-2000™ APC/APC SM SI E-2000™ PC/PC SM or MM

External Plastic (blue for PC and green parts: for APC side; beige for MM)

# 0'/8"

#### STANDARD COLOR FOR E-2000™

Version	SM APC/PC	SM PC/APC	SM PC/PC	SM APC/APC	MM PC/PC
Latch/Frame	green/blue	blue/green	blue/blue	green/green	beige/beige

Other latch and frame colors or frames with mechanical keying available upon request. (latch + frame of same color).

Please refer to the part-specific Color and mechanical Keying of E-2000™ Simplex datasheet.



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### Sacrifical Interface (SI) and UGT

(Optical Transition Adapters)

SINGLE MODE APC/PC - PC/APC

PC/PC - APC/APC

MULTIMODE PC/PC







Fig. 1

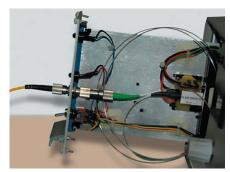


Fig. 2

#### F-3000TM

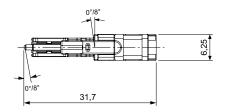
Available types: UGT F-3000™ APC/PC SM

UGT F-3000™ PC/APC SM SI F-3000™ APC/APC SM SI F-3000™ PC/PC SM or MM

External parts: Black plastic

for SM with marking for PC and APC side;

Beige plastic for MM



SC

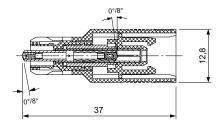
Available types: UGT SC APC/PC SM

UGT SC PC/APC SM SI SC APC/APC SM SI SC PC/PC SM or MM

External parts: Black plastic

for SM with marking for PC and APC side;

Beige plastic for MM



**FC** 

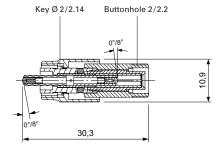
Available types: UGT FC APC/PC SM

UGT FC PC/APC SM SI FC APC/APC SM SI FC PC/PC SM or MM

External parts: Metal

with marking for SM PC and APC side

and for MM 50 $\mu$ m /62.5 $\mu$ m

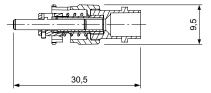


**STTM** 

Available types: SI ST™ PC/PC SM or MM

External parts: Metal

with marking for SM and for MM 50µm /62.5µm



DiaLink

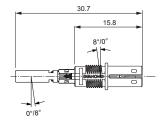
Available types: UGT APC/PC

UGT PC/PC SI APC/APC SI PC/PC

External parts: Plastic

with marking for SM PC and APC side

and for MM 50µm /62.5µm



#### **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** website.

Other versions upon request.