

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 manufacturers 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 technology (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.

Ferrule type

Standard $\varnothing 2.5\text{mm}$, 1.25mm Zirconia/metal insert.
 Except for ST $\varnothing 2.5\text{mm}$ tungsten carbide.

SPECIFICATIONS

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

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

** Measured with high resolution reflectometer HP

Other fibers available upon request

Sacrificial Interface (SI) and UGT

(Optical Transition Adapters)

SINGLE MODE APC/PC - PC/APC
 PC/PC - APC/APC
 MULTIMODE PC/PC



Fig. 1

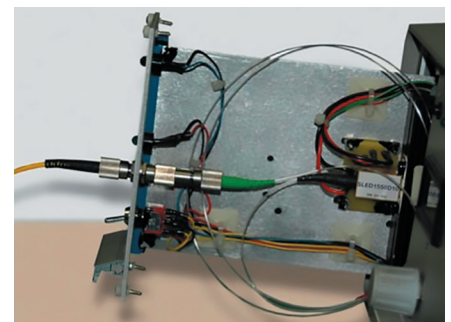


Fig. 2



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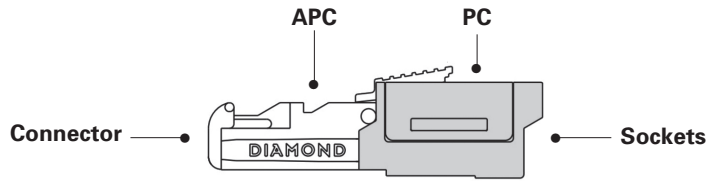
www.diamond-fo.com

Specifications subject to change without notice

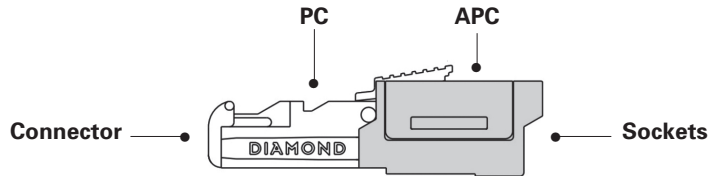
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ASSIGNMENT CONNECTOR FEATURES

Denomination: **UGT APC/PC**



Denomination: **UGT PC/APC**



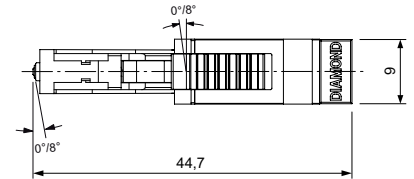
The first value (PC or APC) in the designation corresponds to the plug connector, the second value (PC or APC) to the socket side.

TYPES AND DIMENSIONS

E-2000®

Available types: **UGT E-2000® APC/PC SM**
UGT E-2000® PC/APC SM
SI E-2000® APC/APC SM
SI E-2000® PC/PC SM or MM

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



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 |

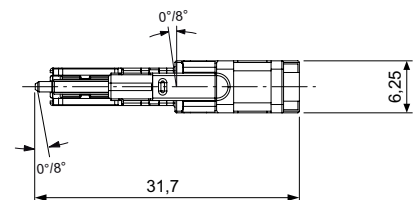
Other latch and frame colors or frames with mechanical keying available upon request.
 (latch + frame of same color).

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

F-3000®

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

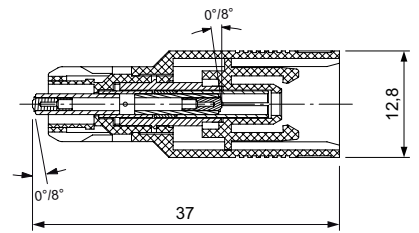
External parts: Black plastic
 for SM with marking for PC and APC side;
 Beige plastic for MM



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

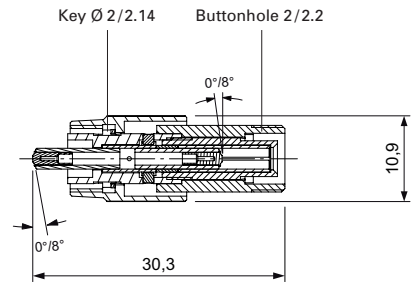
External parts: Black plastic
 for SM with marking for PC and APC side;
 Beige plastic for MM



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

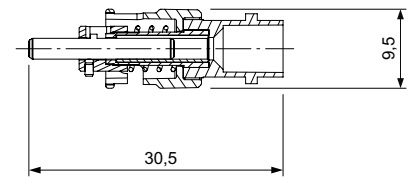
External parts: Metal
 with marking for SM PC and APC side
 and for MM 50µm /62.5µm



ST

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

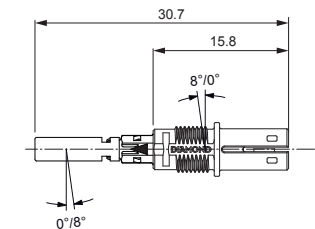
External parts: Metal
 with marking for SM and for MM 50µm /62.5µm



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 Diamond representative or fill in the contact form available on the www.diamond-fo.com website.

Other versions upon request.