DIAMOND
Fiber Optic Components

PATCH CABLES AND MATING ADAPTERS

SINGLE MODE PC/APC
MULTIMODE   PC

The DiaLink connector (patent pending) with its intelligent circular design is setting new standards in fiber-optic cable connections. Its numerous positive characteristics ensure that there are almost no limits to the way in which it can be used – whether its in medical applications, measurement technology or FTTH cabling. The connector allows for simple adaption to a wide range of applications. This is also reflected in our wide range of possible connector configurations. The DiaLink comprises a male and a female connector side. Thanks to the user-friendly design and the push-pull system, the connector can also be used in extremely confined conditions as a device interface or with a high packing density without any problems whatsoever.

DiaLink connector

PROPERTIES AND ADVANTAGES

▶ **Integrated mating adapter**
  Connection with 2 components
▶ **Ideal for use in confined conditions**
  Connector diameter only ø 5 mm
▶ **Resistant to contamination and damage**
  Permanently protected ferrules
▶ **Very easy to use**
  Push-pull locking
▶ **Can be fed into installation pipes and cable channels**
  Tensile force of up to 300 N thanks to the tractive cap
▶ **Neutral weight distribution**
  Suitable for applications with high speeds
▶ **Variant for heavily magnetised environments**
  Cannot be magnetised
▶ **Low risk of breaching protective gloves**
  No corners or edges
▶ **Vacuum-packed (on request)**
  Clean room ISO class 7
▶ **Suitable for use in medical facilities and clean-room environments**
  Can be sterilised using EtO

UGT and sacrificial interface

STANDARDS

▶ IEC 61754-32/Ed1: Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 32: Type DiaLink connector family

DiaLink F-3000™ Hybrid Adapter

DiaLink CONNECTOR SPECIFICATIONS

	MULTIMODE 0° PC	SINGLE MODE 0° PC	SINGLE MODE 8° APC	UNIT	TEST CONDITIONS
Insertion loss (IL)	Typ. 0.15 max. 0.4	Typ. 0.2 max. 0.5	Typ. 0.2 max. 0.5	dB	IEC 61300-3-4; λ = 1310/1550nm
Return loss (RL)	Typ. 40	Min. 50	Min. 75*	dB	IEC 61300-3-6; λ = 1310/1550nm
Repeatability		max. ±0,1		dB	IEC 61300-2-2; λ = 1310/1550nm
Service life		500 connection cycles		-	IEC 61300-2-2
Operating temperature		-40/+85**		°C	

* Measured with the precision reflectometer
** The temperature range of the cable used may limit the connector specification
    DiaLink release (disconnection): at 20-25N

Specifications subject to change without notice

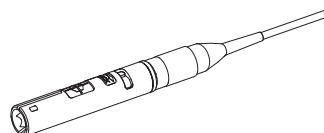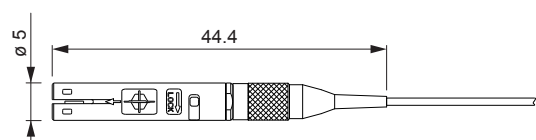## DiaLink male connector

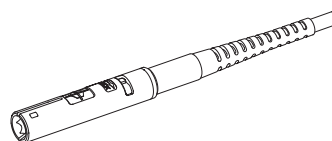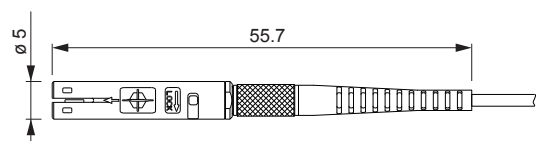## Tractive and protective caps
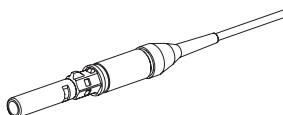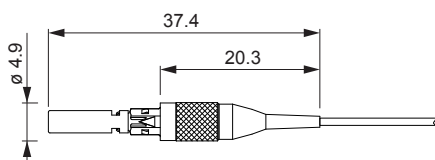
DiaLink male cable connector
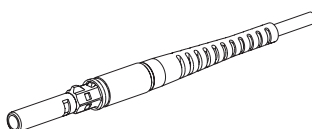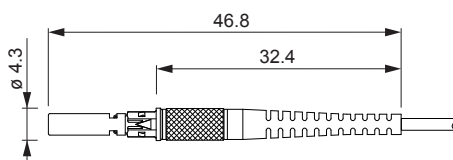
DiaLink female fiber connector

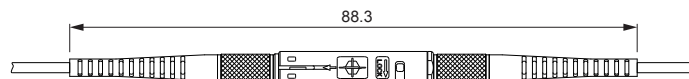## DiaLink female cable connector with bend protection

Dimensions while connected

Versions:	Male DiaLink with PC or APC fiber	Female DiaLink with PC or APC fiber
	Male DiaLink with PC or APC cable	Female DiaLink with PC or APC cable

Cable type: ∅ 1.6 mm – 2.1 mm
Fiber type: ∅ 900 µm
Ferrule material: Zirconia / metal insert
Body material: Plastic
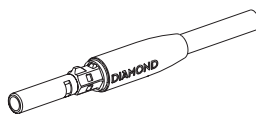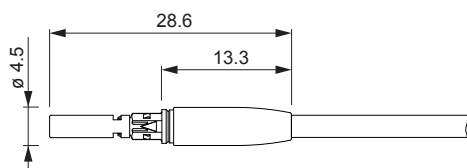Thread material: Metal
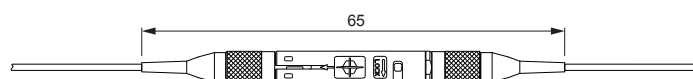
NOTE - The male version features as standard a plastic protective/tractive cap (100N) with ∅ 5mm
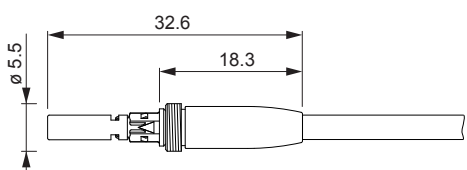
CONNECTOR TYPES AND DIMENSIONS

DiaLink male connector, for special cables
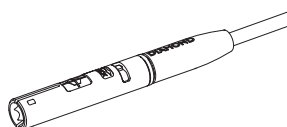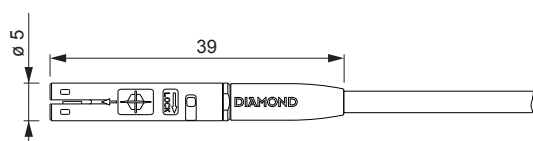
Tractive and protective


DiaLink male connector, for special cables

Specially developed for insertion in installation pipes and cable channels

### DiaLink female connector, for special cables

Dimensions while connected

Versions:	**Male DiaLink PC or APC**	**Female DiaLink PC or APC**
	Male DiaLink with PC or APC thread	

Cable type:	∅ 2.7 mm – 3.0 mm, ITU G.657 B3, Kevlar and reinforced jacket
Ferrule material:	Zirconia / metal insert
Body material:	Plastic
Thread material:	Metal
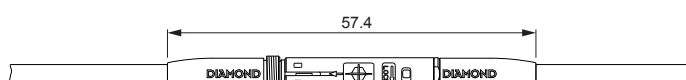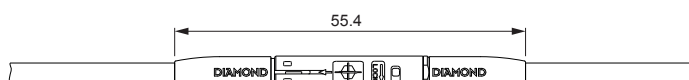
NOTE - The male version with thread features as standard a metallic protective/tractive cap (300N) with ∅ 6 mm
- The male version with thread features as standard a plastic protective/tractive cap (100N) with ∅ 5 mm

ATTACHMENT ACCESSORIES

Mounting clip

P/N: 1073981
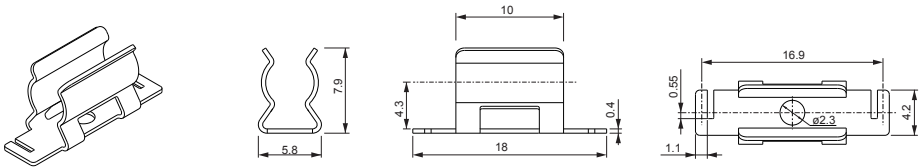
Material: Spring steel

NOTE The mounting clip is attached by means of a central screw.

UGT and sacrificial interface

Optical transition pieces (UGT) are mainly used in installations between the same or different connector designs, e.g. a 0° PC connector to an 8° APC connector.They can also be used as Sacrificial Interface and will protect the connector end face against damage and dirt during the continuous mating cycles.

Versions: **UGT DiaLink**   **PC/APC or APC/PC**
                                    PC/PC or APC/APC

Body material: Plastic / metal
Ferrule material: Zirconia / metal insert
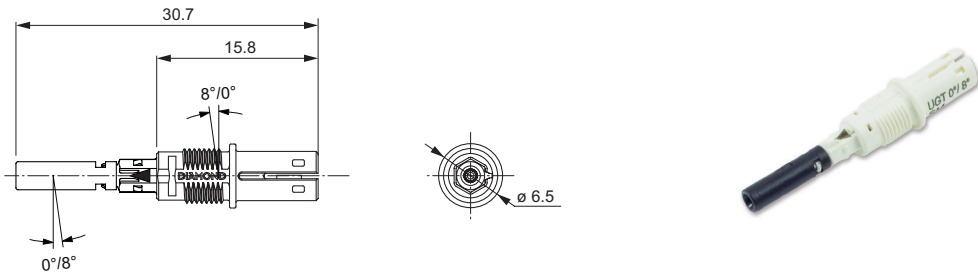
NOTE It is plugged directly into an existing connection point. Also available upon request as panel version with a mounting flange.

SPECIFICATIONS

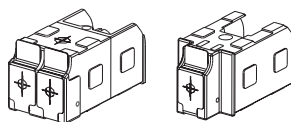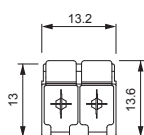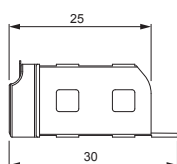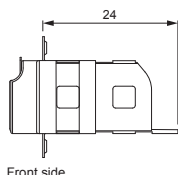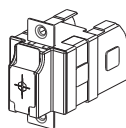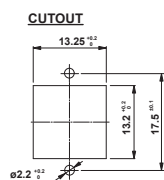|	SM	MM	UNIT	TEST CONDITIONS
Insertion loss (IL)*	max. 0,7 dB	max. 0,5 dB	dB	IEC 61300-3-4; λ = 1310/1550nm
Return loss (RL)	PC min. 45 / APC min. 70**	min. 35 dB	dB	IEC 61300-3-6; λ = 1310/1550nm
IL repeatability	max. ±0,1		dB	IEC 61300-2-2; λ = 1310/1550nm
Service life	500 connection cycles		-	
Operating temperature	-40/+85		°C	

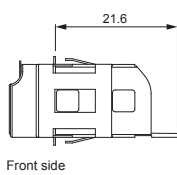## DIALINK - F-3000™ HYBRID MATING ADAPTER
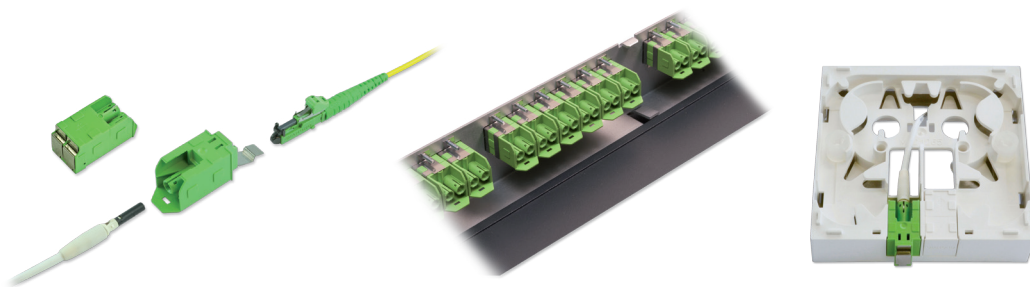
Can be used in:
- FlexPatch
- OTO
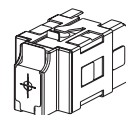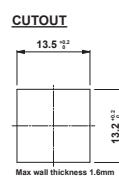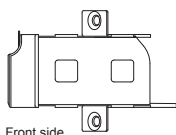- Domestic and industrial distributors

Duplex and simplex hybrid adapters suitable to be mounted on Diamond keystone module, for higher flexibility.
(Keystone module not available as single component for Switzerland)

Duplex / Simplex adapter

Screw clip

CUTOUT

Front side

Quick assembly clip

CUTOUT

Max wall thickness 1.6mm

Front side

45° screw clip

CUTOUT

Shown as left orientation

Front side

45°

Front side
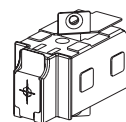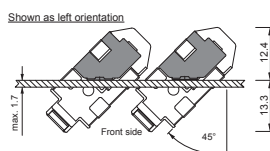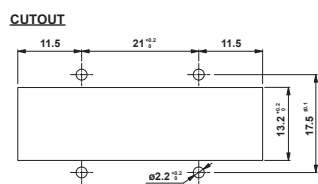
Body material:	Plastic
Protective cap material:	Metal
Mounting clip material:	Metal
Body colour:	SM APC: Green
	SM PC: Blue
	MM 50µm, PC: Beige

NOTE
- A mounting clip is not required for installation in UP or AP sockets
- The external dimensions of the simplex and duplex hybrid adapters are identical
- Available in a wide range of colours

GENERAL INFORMATION

Colour coding

The DiaLink system allows the user to choose the colour of the bend protection (excl. the male and female versions of the DiaLink connectors without bend protection) themselves. Different lines, applications and sources, etc. can be clearly assigned and quickly identified by means of colour coding. The body is white in all connector versions. The bend protection is available in the following 8 colours:

1. Blue   5. Orange
2. Beige (white) 6. Yellow
3. Black   7. Green
4. Red   8. Purple

NOTE   The bend protections are supplied in the colour corresponding to the respective transfer mode and the ferrule cut. Ausgeliefert.

SM APC:	Green
SM PC:	Blue
MM 50µm, PC:	Beige
MM 62.5µm, PC:	Black

Connector and accessory combinations

DiaLink CONNECTOR / ACCESSORIES	CONNECTOR FEMALE	FEMALE CONNECTOR FIBER/CABLE	HYBRID ADAPTER	MOUNTING CLIP	UGT / SACRIFICIAL
Male	✓	✓	✓	-	✓
Male with thread	✓	✓	✓	-	✓
Male fiber / cable	✓	✓	✓	-	✓
Female	-	-	-	✓	✓
Female fiber / cable	-	-	-	✓	✓

ORDER INFORMATION

Please reference the item numbers which can be found on the separate item number list.
Should you require different configurations, please contact your nearest Diamond representative or fill out the contact form on **www.diamond-fo.com**.