DIAMOND Fiber Optic Components

CABLE ASSEMBLIES AND ADAPTERS

The special feature of the new DiaFlex fan-out connection is that the fiber whips can be removed and replaced via a connector system in the divider. This provides greater flexibility in the installation of fiber-optic networks. Cable ends can be replaced flexibly, quickly and without spending a great deal of time or money, and cable installations can be extended as is necessary. Thanks to the feed-in cap, which has a small design, preassembled cables can be inserted directly into pipes or cable ducts. There is therefore no need for expensive splices. The cable and the fiber whips are manufactured in the fiber design and quantity that you requested, inspected and delivered with the corresponding test reports. The DiaFlex contains a DIAMOND multi-fiber connector (MFS) for 8, 12 fibers (24 upon request).

We recommend this product if...

- ... flexibility is required, e.g. in temporary installations
- ... connections have to be upgraded or retrofitted
- ... you do not want to use expensive splices

FEATURES

- Replaceable fiber whips
- Protective cap with feed-in eye
- ► IP class: IP68
- Simple to use on site and no expensive splicing work necessary
- Robust metal fiber divider
- Can be used flexibly thanks to the small external diameter
- Client-specific connector types and cable lengths

TECHNICAL SPECIFICATIONS

MFC connector: - in accordance with EN 186310 and the

TIA/EIA 604-15 standard

Divider connector material: - Blue-anodized aluminium

Dim. DiaFlex 8/12/24 - Max. external diameter of the feed-in cap:

25 mm

- Max. external diameter on the fiber whip side:

27 mm

Fiber whip length: - From 0.5 m to 3 m (other lengths available on

request)

Labelling code: - Swisscom/ DIN/ IEC/ TIA standard

Fiber whip protection: - Optional cable protection

Fiber types available: - MM 50 μm or MM 62.5 μm, SM 9 μm

SPECIFICATIONS (only DiaFlex connection)

	MULTIMODE 0° PC	SINGLE MODE 0° PC	SINGLE MODE 8° APC	UNITS	TEST CONDITIONS
Insertion Loss (IL)	typ. 0.35	typ. 0.25 max. 0.75	typ. 0.25 max. 0.75	dB	IEC 61300-3-4
Return Loss (RL)	typ. 30	min. 40	min. 60*	dB	IEC 61300-3-6
Repeatability of IL	max. ±0.2			dB	IEC 61300-2-2
Service life	500 mate/demate cycles				
Operating temperature	-25/+70**			°C	IEC 61300-2-22
Storage temperature	-25/+70**			°C	
Cable retention (Multi fiber cable side)	700			N	IEC 61300-2-4

- * Measured with high precision reflectometer
- ** May be further limited by cable specifications

NOTE Whips tested at an operating temperature of -10°/+60°



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DiaFlex

SINGLE MODE PC/APC MULTIMODE PC



DiaFlex with fiber whips



DiaFlex connector system (male and female)



DiaFlex with protective and feed-in cap



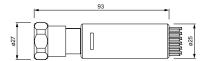
DiaFlex as a pre-assembled solution

CABLE SPECIFICATIONS

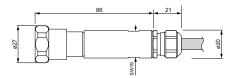
CABLE	INDOOR AND OUTDOOR	OUTDOOR FLEXIBLE***	TEST CONDITIONS
Number of Fibers	8 /12 24	8 12	
Diameter of Cable	7.6 9,5	8.2 8.6	
Tensile Load**	1000 1000	1100 1250	EN 60764-1-2E1
Bend Radius	115 140	132 140	EN 60764-1-2E11
Crush Resistance	200 200		EN 60764-1-2E3
Operating temperature in °C *	-25 +60	-40 +70	
Storage temperature in °C *	-25 +70	-40 +70	
Material	FR / LSOH	PU / Aramid	

- * May be further limited by cable specifications
- ** Refers only to the cable. The tensile strength of the DaiFlex connector is always min. 700N
- *** Cable versions break-out, Kevlar reinforced and highly flexible

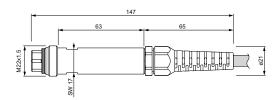
DiaFlex female 24 channels with whips



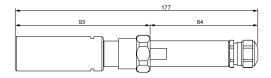
DiaFlex female with cable gland



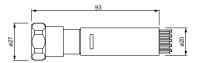
DiaFlex male with cable boot



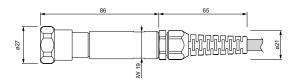
DiaFlex connection



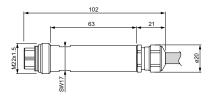
DiaFlex female 12 channels with whips



DiaFlex female with cable boot

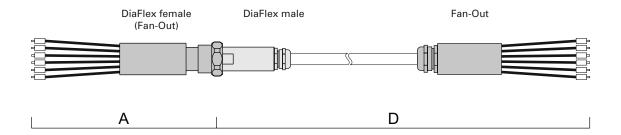


DiaFlex male with cable gland

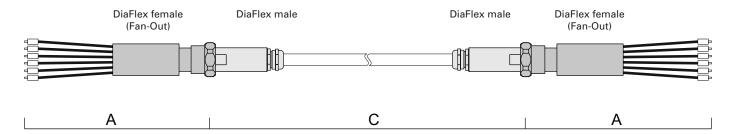


POSSIBLE CONFIGURATIONS

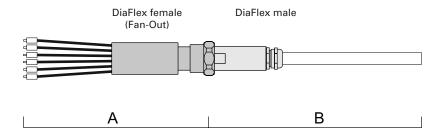
Assembled DiaFlex - Fan-Out patchcord



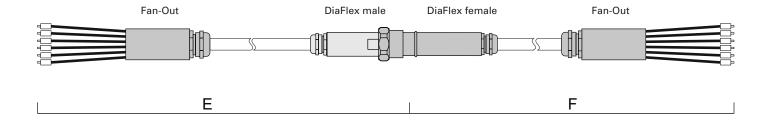
Assembled DiaFlex – DiaFlex patchcord



Assembled DiaFlex - DiaFlex pigtail

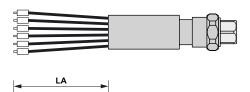


Assembled Fan-Out - DiaFlex - Fax-Out patchcord

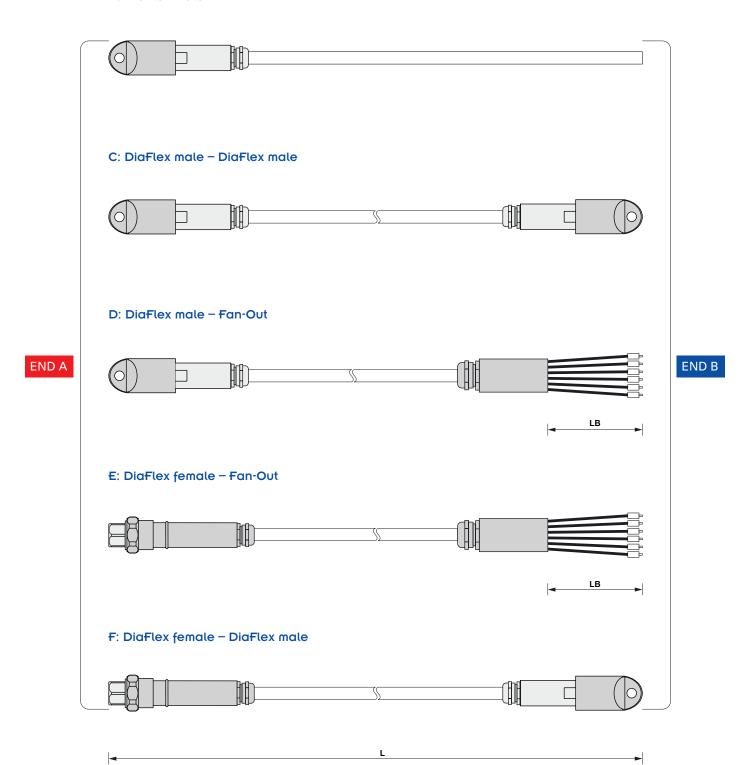


DIALINK SINGLE PARTS

A: DiaFlex female (Fan-Out)



B: DiaFlex male



ORDER INFORMATION

Configuration for part A (DiaFlex female Fan-Out)

Connector type	Cord				
Connector type cord					
□ E-2000® □ F-3000® □ FC □ SC □ ST™ □ DiaLink male □ ———	Length <i>L A</i> max. 3m				
□ 0° PC □ 8° APC	Staggering Yes (4cm) No				
Cord Identification A**					
Color code according to: Swisscom DIN D. Numbered					
Number of connectors					

Configuration for parts B, C, D, E, F

END A			END B			
	Multi-fib	er Cable	DiaFlex male: PC APC			
☐ DiaFlex male ☐ SM PC	Cable	Fibers	☐ Fan-Out			
	Fiber count	•	Connector type	Cord		
	□ 8 □ 24		Connector type cord			
SM APC	12		☐ E-2000® ☐ F-3000® ☐ FC	Length <i>L B</i>		
ММ РС	Cable type	Fiber type		max. 3m		
	□ Indoor and outdoor □ Outdoor □ □ —	 SM 9/125μm MM 50/125μm MM 50/125μm OM3 MM 50/125μm OM4 	□ SC □ ST™			
			☐ DiaLink male			
			-			
				Staggering		
☐ DiaFlex female		MM 62,5/125μm	□ 0° PC	Yes (4cm)		
☐ SM PC			☐ 8° APC	☐ No		
☐ SM APC ☐ MM PC	Cable length <i>L</i>					
	— m		Cord Identification B **			
	Delivered as air ring (Standa	ard max. 100m)	Color code according to: Swisscom DIN DIN Numbered			
	Delivered on reel (Standard					
Number of connections						

HINWEISE Parts A to F are delivered as individual sub parts and not as configured as total part.