

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 (MFC) 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 (not 24 channels)	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°



DIAMOND SA • Via dei Patrizi 5 • CH-6616 Losone • Switzerland
Tel. +41 91 785 45 45 • Fax +41 91 785 45 00 • e-mail info@diamond-fo.com

www.diamond-fo.com

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

Specifications subject to change
without notice

BDD 1951544 01_16

CABLE SPECIFICATIONS

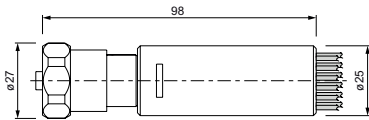
CABLE	INDOOR AND OUTDOOR	OUTDOOR FLEXIBLE***	TEST CONDITIONS
Number of Fibers	8 /12 24	8 12	
Diameter of Cable	7.6 9,5	6.6 7.0	
Tensile Load**	1000 1000	1100 1250	EN 60764-1-2E1
Bend Radius	115 140	132 140	EN 60764-1-2E11
Crush Resistance	200 200		EN 60764-1-2E3
Operating temperature in °C *	-25 +60	-40 +70	
Storage temperature in °C *	-25 +70	-40 +70	
Material	FR / LSOH	PU / Aramid	

* May be further limited by cable specifications

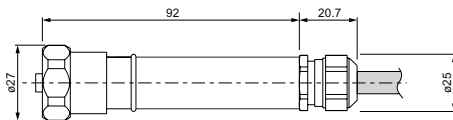
** Refers only to the cable. The tensile strength of the DaiFlex connector is always min. 700N

*** Cable versions break-out, Kevlar reinforced and highly flexible

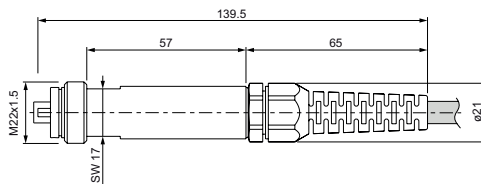
DiaFlex Female with whips



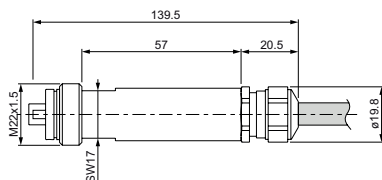
DiaFlex Female with FanOut Cable (only 12 channels)



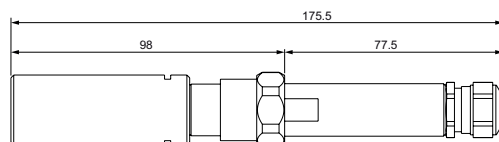
DiaFlex Male with cable boot



DiaFlex Male with cable gland

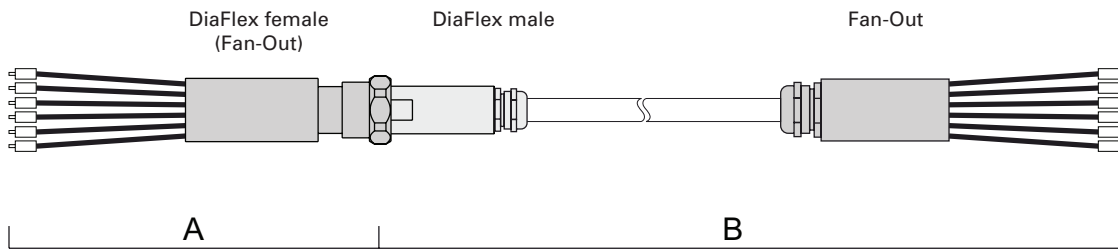


DiaFlex connection

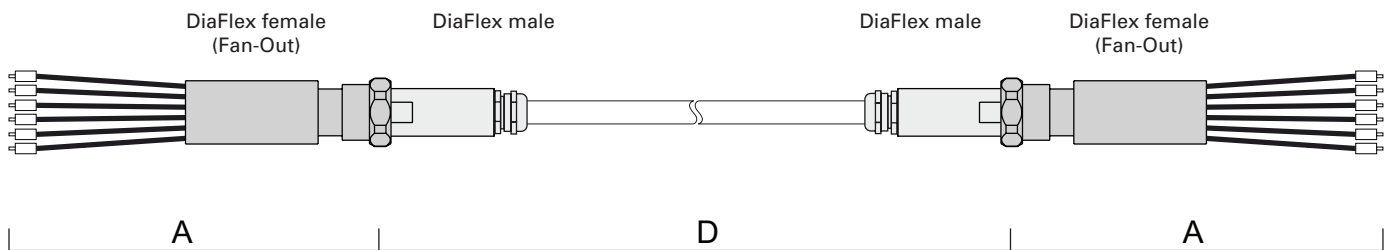


POSSIBLE CONFIGURATIONS

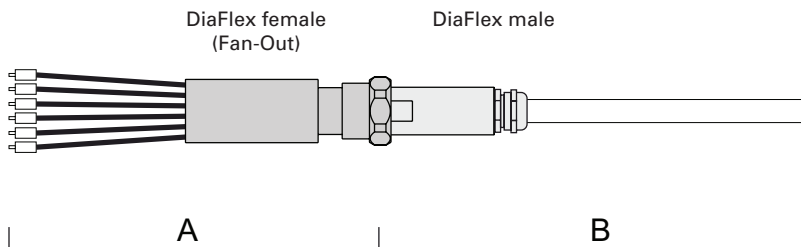
Assembled DiaFlex – Fan-Out patchcord



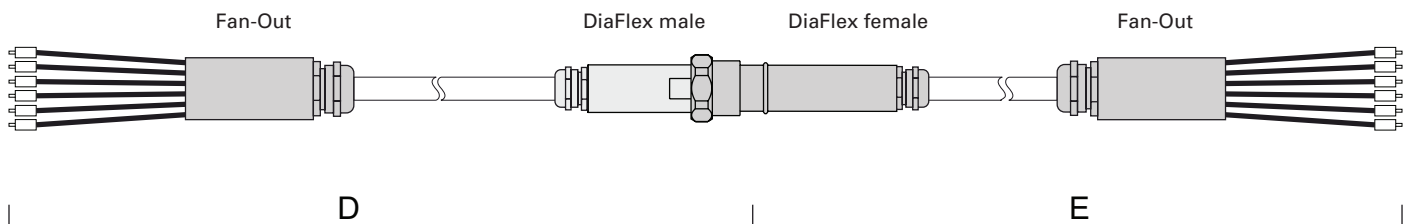
Assembled DiaFlex – DiaFlex patchcord



Assembled DiaFlex – DiaFlex pigtail

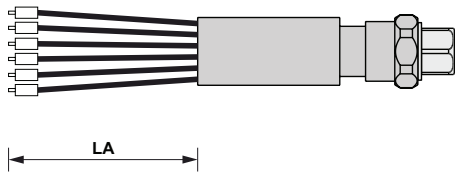


Assembled Fan-Out – DiaFlex – Fax-Out patchcord

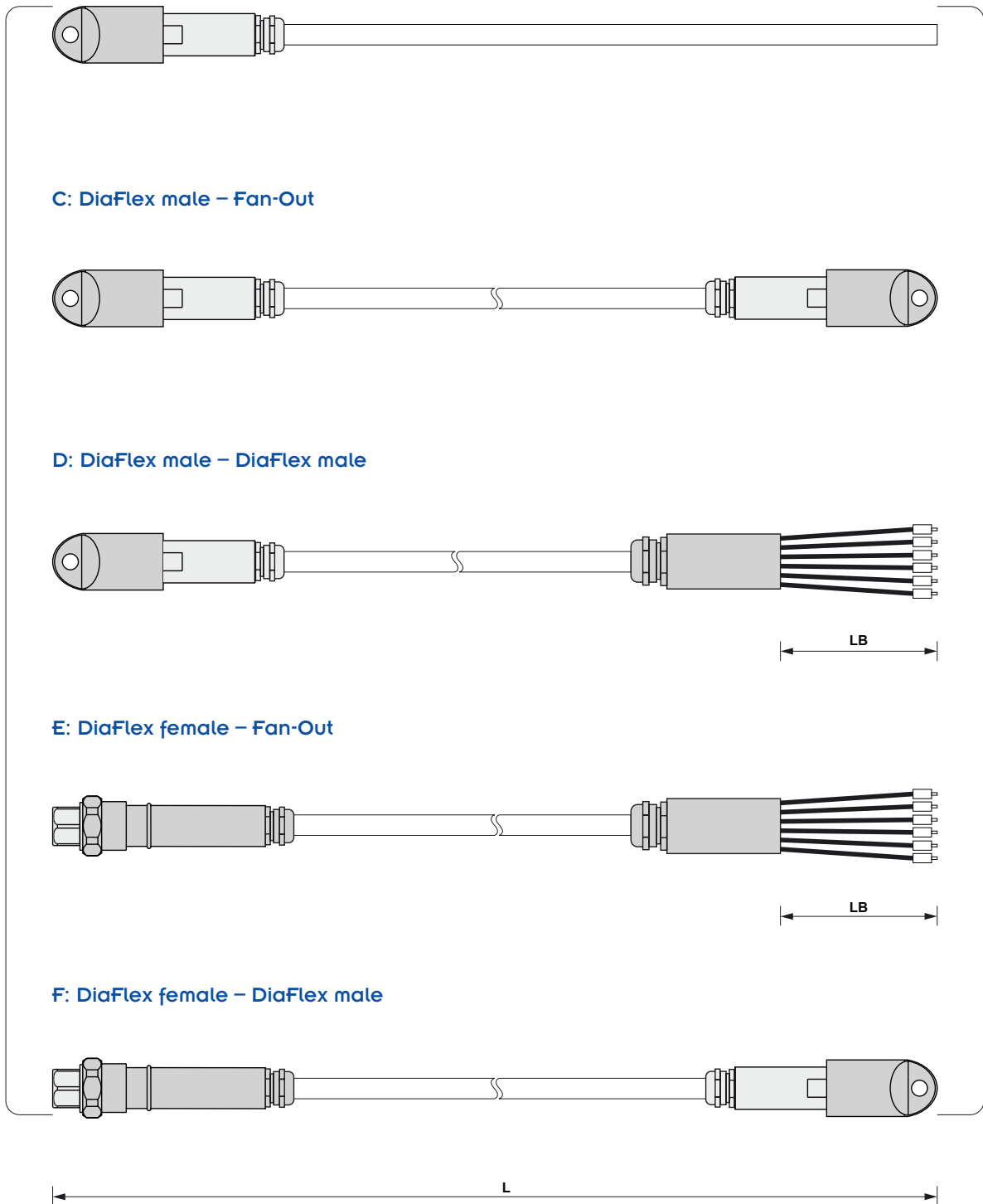


DIALINK SINGLE PARTS

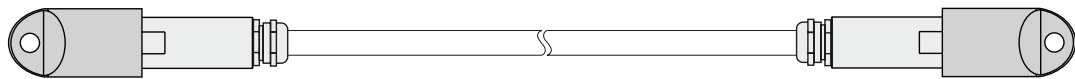
A: DiaFlex female (Fan-Out)



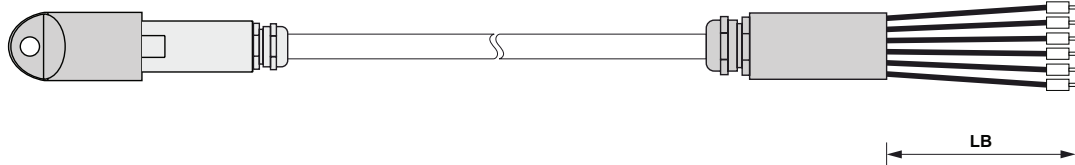
B: DiaFlex male



C: DiaFlex male – Fan-Out



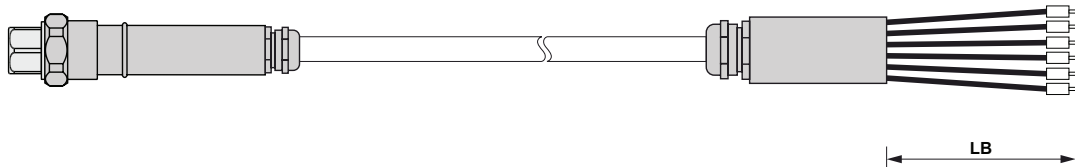
D: DiaFlex male – DiaFlex male



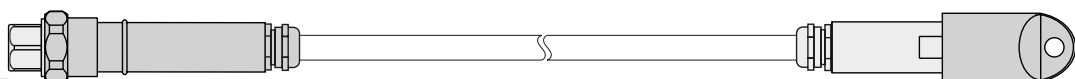
END A

END B

E: DiaFlex female – Fan-Out



F: DiaFlex female – DiaFlex male



ORDER INFORMATION

Configuration for part A (DiaFlex female Fan-Out)

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

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

END A	Multi-fiber Cable		END B
<input type="checkbox"/> DiaFlex male <input type="checkbox"/> SM PC <input type="checkbox"/> SM APC (not 24 channels) <input type="checkbox"/> MM PC			DiaFlex male: <input type="checkbox"/> PC <input type="checkbox"/> APC (not 24 channels)
			<input type="checkbox"/> Fan-Out
<input type="checkbox"/> DiaFlex female <input type="checkbox"/> SM PC <input type="checkbox"/> SM APC (not 24 channels) <input type="checkbox"/> MM PC	Cable	Fibers	Connector type
	Fiber count <input type="checkbox"/> 8 <input type="checkbox"/> 24 <input type="checkbox"/> 12		Cord
Cable type <input type="checkbox"/> Indoor and outdoor <input type="checkbox"/> Outdoor <input type="checkbox"/> _____		Fiber type <input type="checkbox"/> SM 9/125µm <input type="checkbox"/> MM 50/125µm <input type="checkbox"/> MM 50/125µm OM3 <input type="checkbox"/> MM 50/125µm OM4 <input type="checkbox"/> MM 62,5/125µm <input type="checkbox"/> _____	Connector type cord <input type="checkbox"/> E-2000™ <input type="checkbox"/> F-3000™ <input type="checkbox"/> FC <input type="checkbox"/> SC <input type="checkbox"/> ST™ <input type="checkbox"/> DiaLink male <input type="checkbox"/> _____
Cable length <i>L</i> _____ m <input type="checkbox"/> Delivered as air ring (Standard max. 100m) <input type="checkbox"/> Delivered on reel (Standard min. 100m)			Length <i>L B</i> _____ max. 3m Staggering <input type="checkbox"/> Yes (4cm) <input type="checkbox"/> No
			Cord Identification B **
			Color code according to:
			<input type="checkbox"/> Swisscom <input type="checkbox"/> DIN <input type="checkbox"/> _____ <input type="checkbox"/> Numbered _____
Number of connections _____			

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