

Connectivity solutions – multipatchcords

TFM



TEFM SafeBranch 2 pre-connectorized multi-fiber cables are specifically designed to serve in FTTA applications. Therefore, the cables establish optical direct connection between the remote radio unit (RRU) and the base transceiver station (BTS). Special construction based on 1.8 and 2.8 mm kevlar reinforced fanouts and furcation point with an epoxy filler provides extra protection, thus the product withstands environmental factors, which are characteristic features of FTTA deployments. A product is available with SM and MM fibers and with various connector types. Thanks to high mechanical durability and resistance to outdoor conditions, the TEFM multipatchcords can be used in FTTA applications as well as other demanding environments. Moreover, the connectors, which are factory installed and tested, facilitate the on-site installation. Therefore, the product can be applied in severe conditions as it has high crash resistance.

APPLICATIONS

FTTX applications,
FTTA applications,
Structured cable systems,
Distribution points, cabinets/racks connections.

FEATURES

Furcation point construction based on epoxy filler provides extra protection,
Outdoor conditions resistance,
Stable attenuation in variable temperature conditions,
High furcation point crush resistance,
High quality,
Wide range of fiber optic connectors.

TECHNICAL SPECIFICATIONS:

Mechanical, environmental and optical parameters:

Max. Tensile load (tube to furcation point)	IEC 61753-2-1	150N (1.8-2.8mm)
Crush performance (furcation point)	EN 187101, IEC 60794-1-2-E3, no attenuation increase	1000 N
Installation temperature range *	EN 187101, IEC 60794-1-2-F1, no attenuation increase	-10... +50 [°C]
Operation *		-40... +70 [°C] dla 1.8, 2.8 mm
Transport and storage *		-40... +70 [°C] dla 1.8, 2.8 mm
Max connector Insertion Loss	IEC 61300-3-4	≤ 0.3dB
Max connector Return Loss	IEC 61300-3-6	RL≥65 dB(APC); RL≥50 dB(SM UPC); RL≥30 dB(MM PC)

* concerns the furcation point, depends on a cable type

Type:	Multipatchcords TFM	REV: 1.0
Ref:	TFM-xx, see ordering information	
Date:	31.07.2019	KGB
Modification:		

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CONSTRUCTION:

Furcation point is protected by a metal tube with epoxy filler, and covered with heatshrink tube (structure diagram – see attachment). Dimensions depend on a furcation construction. Details below:

Furcation point maximum outer diameter [mm]*	Ø 10	Ø 12
Furcation point +/-10 mm	30	30
Number of fibers in 1.8/2.8 mm fanouts	1-2	3-4
Connector type	SC/SCA/E2/E2A/LC/LCA/FC/FCA/ST	

* If fiber quantity in cable is greater than fanouts quantity, then declared outer diameter of furcation may be greater

Possibility of installing a gland on one or both sides of pre-connectorized multipatchcord. Size is matched to a tube diameter (details in attachment). Threads PG 13,5 and PG 16 are compatible with FIBRAIN patch panels.

Output legs are marked with number tags. In case there are two legs per side – with boot colour or a black band.

Types of output legs protection (details in attachment):

- Corrugated tube
- Foil sleeve
- Foil sleeve with a loop for pulling through
- Elastic protection sleeve with a loop for pulling through

WRAPPING AND PACKING:

Pre-connectorized multipatchcords are available as a coil or wrapped on a cable drum, then secured with stretch film and/or packed in plastic bags (depending on the dimensions of a final product and the wrapping). The type of drum is selected to match the length and size of a patchcord.

- Coil – max 200 m
- Drum - max 200 m

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ORDERING INFORMATION:

TFM-04FC00502-04LC00502-10A04-010-12-121

FIBRAIN PRECONNECTORIZED EXO-G0 PE 10M 4* G.652D 04FC/42LC SAFEBRANCH 2

TFM	Pre-connectorized multi-fiber cables TEFM		
4FC	Inner side connectors quantity and type		
	SA SC APC	E2 E2000 PC	0000 - no furcation
	SC SC PC	FA FC APC	
	LA LC APC	FC FC PC	
	LC LC PC	ST ST PC	
	EA E2000 APC	XX No connectors	
0 050 2	First digit – Inner side furcation option*	Three following digits – inner side max output length in cm*	Last digit – inner side fanout diameter
	0 Equal length of outputs	Min: 30 cm, max: 200 cm	1 Fanout 1.8mm
	1 Single cascade	<i>Cascade furcation length = the longest leg length</i>	2 Fanout 2.8mm
	2 Double cascade		3 Fanout harsh 3.0mm **
	No digits – when no furcation		
04LC	Outer side connectors quantity and type - see above		
0 050 2	Outer side furcation option, output length and fanout diameter – see above		
10 A 04	Cable type	Fiber type	Quantity of fibers in a cable
	See attachment	A G652D F G657B3 B G655 G G657B3+ C G656 H OM1 D G657A1 I OM2 E G657A2 K OM3 L OM4	
010	Total length in meters		
12	First digit – inner side fanouts protection type, Second digit - outer side:		
	0 When no furcation on one side		
	1 Corrugated tube		
	2 Foil sleeve		
	3 Foil sleeve with a loop for pulling through		
	4 Elastic protection sleeve with a loop for pulling through		
1 21	First digit - wrapping	Two following digits – glands	
	1 Coil	No digit	No glands on both sides
	2 Cable drum	0	No gland on one side
		1	Gland
		2	Threaded flex cable protection
		<i>(e.g.: 101 –coil, gland on the outer side; 212 – drum, gland on the inner side, threaded flex cable protection on the outer side)</i>	

* details in attachment

** Fanout 1.8 mm reinforced with a 3.0 mm metal spring tube (2000 N), available connectors: SC APC/PC, LC APC/PC

ATTACHMENTS:

- Multipatchcords – additional information.

Important notice

Buyer and/or user of this product has to make sure before using this product that it is suitable for the intended use. All questions of liability relating to this product are subject – in accordance with the prevailing – to the Term of Sale of the selling Fibrain subsidiary.