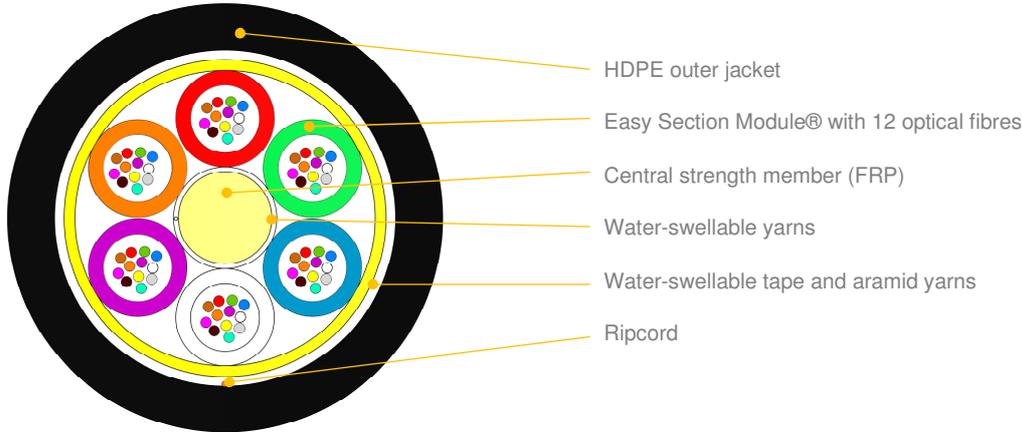


Type:	MK-FM6-PE	REV: 1.6
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Status:	RTM	

## Single HDPE jacket ESM™ module microcable with aramid yarns and FRP rod reinforcement MK-FM6 PE



\*Schematic drawing, not to scale

### VARIANTS

Variant	Quantity [pcs]				Ø nominal (±5%) [mm]	Nominal weight (±10%) [kg/km]
	Fibres	Fibres per tube	Total elements	Active tubes		
1-6T x 12F	12-72	12	6	1-6	6,0	30

### APPLICATION

Temperature range	Transport & Storage:	- 40 to + 70 °C	Minimum Bending Radius	
	Installation:	- 15 to + 60 °C	Under maximum tension:	20 x cable Ø
	Operation:	- 30 to + 70 °C	Without tension:	20 x cable Ø

### TECHNICAL AND ENVIRONMENTAL CABLE CHARACTERISTICS

Test	Standard	Conditions	Requirements*
Tensile strength	IEC60794-1-21 Method E1	Max allowed tension: 650 N	$\Delta\epsilon \leq 0.33\%$ , $\Delta\alpha$ reversible
		Max operating tension: 150 N	$\Delta\epsilon \leq 0.05\%$ , $\Delta\alpha \leq 0.05$ dB/km
Crush resistance	IEC60794-1-21 Method E3	Load: 400 N / 100 mm, max. 15 min	$\Delta\alpha \leq 0.1$ dB, no significant damage
Impact resistance	IEC60794-1-21 Method E4	Impact energy: 5J Radius: 300 mm No. of impacts: 3 ( 500mm apart)	$\Delta\alpha \leq 0.1$ dB, no significant damage
Torsion	IEC60794-1-21 Method E7	No. of cycles: 10 Twist angle: $\pm 180^\circ$ Load: 100N	$\Delta\alpha \leq 0.1$ dB, no significant damage
Repeated bending	IEC60794-1-21 Method E6	Radius: 20xD Load: 100N No. of cycles: 35	$\Delta\alpha \leq 0.1$ dB, no significant damage
Cable bend	IEC60794-1-21 Method E11	Radius: 20xD No. of turns: 4 No. of cycles: 3	$\Delta\alpha \leq 0.1$ dB, no significant damage
Temperature cycling	IEC 60794-1-22 Method F1	-30 °C to +60 °C -40 °C to +70 °C	$\Delta\alpha \leq 0.1$ dB/km $\Delta\alpha$ reversible

(\*) values for single-mode fibres, all optical measurements performed at @1550nm

### OPTICAL FIBRES AND LOOSE TUBES COLOUR IDENTIFICATION

For optical fibres and modules identification information please see [DSH\\_Colors\\_CODE\\_XXXX](#) document.

### FIBRES PARAMETERS

For selected post-production optical fibres parameters please see [DSH\\_OFP](#) document.

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**MARKING**

The following print (laser or inkjet) is applied at 1-meter intervals:

- Supplier: FIBRAIN
- Standard code (Product type, fibre type, fibre count)
- Year of manufacture: xxxx
- Length marking in meters
- Cable ID / Drum No

Example: FIBRAIN METROJET MK-FM6 72F SM G657A1 6T12F "YEAR OF MANUFACTURE" "LASER SYMBOL" "LENGTH MARKING" "BATCH NUMBER"

The accuracy of marking is  $\pm 0,5\%$ . Remarking is in accordance with Bellcore GR 20 and supersedes earlier markings. Occasional loss of marking is possible. Cables can be supplied with a range of single mode or multimode fibres and customized print.

**PACKING**

Cables are shipped on disposable wooden or treated wooden drums. Both ends of the cable are capped and at least one is accessible for testing. Identification information is placed on a drum. Typical spool length is 2000 – 6000 meters  $\pm 5\%$ , with possibility of supplying up to 5% of total contract quantity as short length cables which should be above 1000 meters long. Tolerance of 5 % of order quantity shall be allowed.

*This document and the statements contained in it are not intended for customers within the meaning of the Civil Code. The information submitted in this document is to our knowledge and belief true at the time of issue, however, we do not assume any liability whatsoever for its accuracy, and completeness. This document is for informational purposes on an "as is" basis only and Fibrain reserves the right to change its contents at any time without prior notice. The specification cannot, in any case, be considered an offer within the meaning of the Civil Code and is not contractually valid unless specifically authorized by Fibrain. Before using this product, its buyer and/or user has to make sure that it is suitable for the intended use. All liability issues related to this product are subjected to the seller's separate Terms of Sale or the terms and conditions agreed with the Fibrain representative or distributor.*