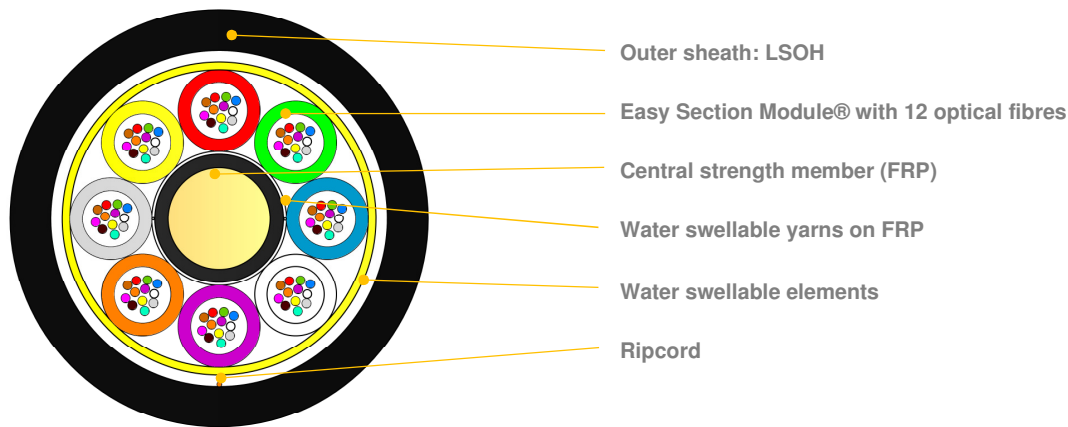


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Single LSOH jacket ESM™ module microcable MK-FM7



*Schematic drawing, not to scale

APPLICATION:

Cable for indoor installation
Fully dielectric cable
Flexible network design
Distribution network

DESIGN:

ESM™ modules with 12 fibers in each module
Gelly filled Easy Section Modules with 12 optical fibres each
Water swellable and tensile strength elements
FRP rods as strength and anti-buckling elements
Flame retardant LSOH outer sheath
Polyester rip cord

CABLE DESIGNS

Variant	Quantity [pcs]				Ø nominal (±5%) [mm]	Nominal weight (±10%) [kg/km]
	Fibres	Fibres per tube	Total elements	Active tubes		
8T x 12F	96	12	8	8	6.6	49

APPLICATION

Temperature range	Transport & storage:	- 40 to + 70 °C	Minimum Bending Radius	
	Installation:	- 5 to + 60 °C		Under tension: 20 x cable Ø
	Operation:	- 30 to + 70 °C		Without tension: 15 x cable Ø

MAIN MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS

Test	Test Standard	Specified Value	Requirement
Max allowed tension	IEC 60794-1-21-E1	900 N	$\Delta\epsilon \leq 0.5\%$, $\Delta\alpha$ reversible
Max long term tension	IEC 60794-1-21-E1	100 N	$\Delta\epsilon \leq 0.2\%$, $\Delta\alpha \leq 0.05$ dB/km
Crush	IEC 60794-1-21-E3	300 N / 100 mm, max. 5 min	$\Delta\alpha \leq 0.1$ dB, no significant damage
Impact	IEC 60794-1-21-E4	5 Nm, 3 impacts, R= 300 mm	$\Delta\alpha \leq 0.1$ dB, no significant damage
Torsion	IEC 60794-1-21-E7	100N, $\pm 180^\circ$, 10 cycles	$\Delta\alpha \leq 0.1$ dB, no significant damage
Repeated bending	IEC 60794-1-21-E6	R=20 x D, 50N, 35 cycles	$\Delta\alpha \leq 0.1$ dB, no significant damage
Cable bend	IEC 60794-1-21-E11	R=20 x D, 5 turns, 2 cycles	$\Delta\alpha \leq 0.1$ dB, no significant damage
Temperature cycling	IEC 60794-1-22-F1	-30°C to +70°C -40°C to +70°C	$\Delta\alpha \leq 0.1$ dB/km $\Delta\alpha$ reversible
CPR Class	EN 50575:2014+A1:2016		Dca – s2, d1, a1

(*) 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 (ink jet) is applied at 1-meter intervals:

- Handset symbol
- CPR Euro Class
- Double Sine symbol
- Supplier FIBRAIN
- Type of cable
- Year of manufacture: xxxx
- Standard code (Product type, fibre type, fibre count)
- Length marking in meters
- Cable ID / Drum No

Example:

“HANDSET” – EN 50575 Dca – s2, d1, a1 – “DOUBLE SINE” – FIBRAIN – Fibre Optic Cable – “YEAR OF MANUFACTURE” – MK-FM7 LSOH 96F SM G657A1 8M12F – “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 will be shipped on disposable wooden or treated wooden drums. Both ends of the cable will be capped and accessible for testing. Identification information label will be placed on the drum.

DELIVERY LENGTH

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.

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