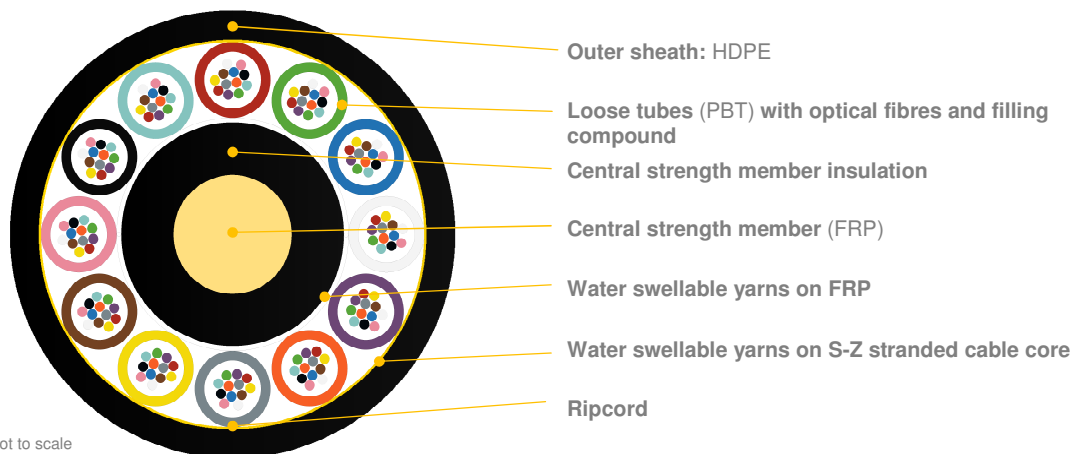


Type:	Metrojet MK-LXS8	REV: 1.3
Construction:	29/07/2015	PB
Modify:	11/01/2019	AM

MetroJET MK-LXS8 - Multi loose tube microcable (up to 144F)



*Schematic drawing, not to scale

APPLICATION:

Microduct cabling air-blowing system application
 Metro networks
 Flexible network design
 Distribution network

DESIGN:

HDPE, UV stabilized outer jacket with low coefficient of friction
 Loose tubes (and fillers), SZ stranded around the CSM
 Each PBT tube containing up to 12 optical fibres
 Smallest outer diameter for blowing into 10mm (ID) ducts

CABLE DESIGNS:

Variant	Quantity [pcs]				Ø nominal (±5%) [mm]	Nominal weight (±10%) [kg/km]
	Fibres	Fibres per tube	Total elements	Active tubes		
12T x 4F	48	4	12	12	7.8	47
12T x 6F	72	6	12	12	7.8	48
12T x 8F	96	8	12	12	7.8	49
12T x 10F	120	10	12	12	7.8	50
12T x 12F	144	12	12	12	7.8	52

APPLICATION:

Suggested Duct - Ø (min)	mm	16/12mm, 14/12mm, 12/10mm, 14/10mm	
Temperature Range	Transport & Storage:	- 40 to + 70°C	Minimum Bending Radius
	Installation:	-15 to + 55°C	Under Maximum Tension: 20 x cable Ø
	Operation:	- 30 to + 60°C	Without Tension: 10 x cable Ø

MAIN MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS (according to IEC 60794-5 and EN 187000)

Test	Test Standard	Specified Value	Requirement*
Max allowed tension	IEC 60794-1-21-E1	1500 N	$\Delta\epsilon \leq 0.33\%$, $\Delta\alpha$ reversible
Max operating tension	IEC 60794-1-21-E1	550 N	$\Delta\epsilon \leq 0.05\%$, $\Delta\alpha \leq 0.05$ dB/km
Crush	IEC 60794-1-21-E3	600 N / 100 mm, max. 15 min	$\Delta\alpha$ reversible, no significant damage
Impact	IEC 60794-1-21-E4	5Nm, 3 impacts, R= 300 mm	$\Delta\alpha \leq 0.05$ dB after the test
Torsion	IEC 60794-1-21-E7	100N, +/- 180°, 10 cycles	$\Delta\alpha \leq 0.05$ dB, no damage
Repeated Bending	IEC 60794-1-21-E6	R=20x D, 100N, 35 cycles	no damage
Cable Bend	IEC 60794-1-21-E11	R=20x D, 4 turns, 3 cycles	$\Delta\alpha \leq 0.05$ dB, no damage
Temperature Cycling	IEC 60794-1-22-F1	-15°C to +60°C -30°C to +70°C	$\Delta\alpha \leq 0.05$ dB/km $\Delta\alpha \leq 0.10$ dB/km
Water Penetration	IEC 60794-1-22-F5B	sample=3m, water column=1m, 24h	no water leakage

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

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OPTICAL FIBRES AND LOOSE TUBES COLOUR IDENTIFICATION

Fibres and tubes identification information see **DSH_Colors_CODE_XXXX** document.

FIBRES PARAMETERS

Optical fibres parameters see **DSH_OFP** document.

MARKING

The following print (white / ink jet) 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: METROJET MK-LXS8 144F SM G652D 12T12F "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 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 – 8000 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.

The information is believed to be correct at the time of issue. Fibrain reserves the right to change this specification without prior notice. This specification is not contractually valid unless specifically authorised by Fibrain. 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 Terms of Sale of the selling Fibrain subsidiary.