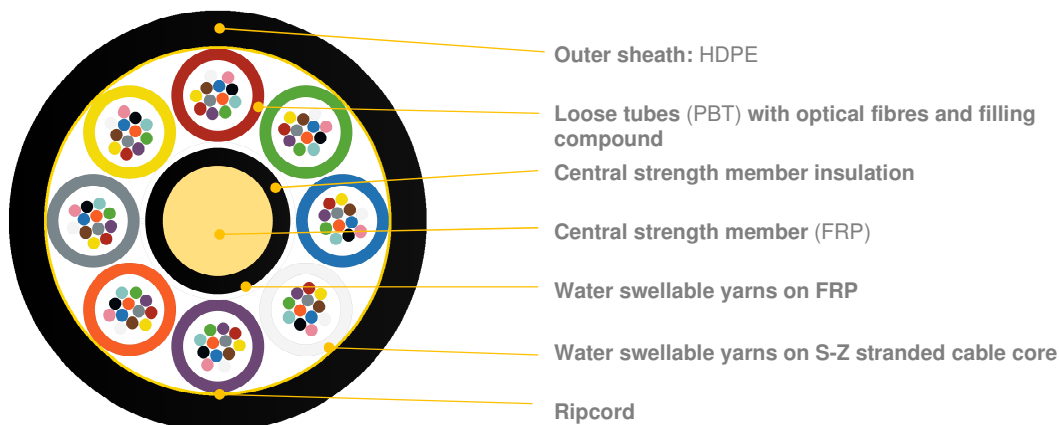


Type:	Metrojet MK-LXS7	REV: 0
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MetroJET MK-LXS7 - Multi loose tube microcable (up to 96F)



*Schematic drawing, not to scale

APPLICATION:

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

DESIGN:

UV stabilized halogen free HDPE sheath
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

CABLE DESIGNS:

Variant	Quantity [pcs]				Ø nominal (±5%) [mm]	Nominal weight (±10%) [kg/km]
	Fibres	Fibres per tube	Total elements	Active tubes		
8T x 4F	32	4	8	8	6.2	28
8T x 6F	48	6	8	8	6.2	28
8T x 8F	64	8	8	8	6.2	29
8T x 10F	80	10	8	8	6.2	30
8T x 12F	96	12	8	8	6.2	31

APPLICATION:

Suggested Duct - Ø (min)	mm	16/12mm, 14/12mm, 12/10mm, 14/10mm, 12/8mm, 10/8mm			
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

Test	Test Standard	Specified Value	Requirement
Max allowed tension	IEC60794-1-21 Method E1	Load: 1200 N	$\Delta\epsilon_f \leq 0.33\%$, $\Delta\alpha$ reversible No significant damage to fibre unit
Max operating tension		Load: 350N	$\Delta\epsilon_f \leq 0.05\%$, $\Delta\alpha \leq 0.05$ dB/km No significant damage to fibre unit
Crush	IEC 60794-1-21 Method E3	Short term: 1000 N / 100 mm, 1 min	$\Delta\alpha$ reversible, No significant damage to fibre unit
Impact	IEC 60794-1-21 Method E4	Impact energy: 5J, 3 impacts, R= 300 mm	$\Delta\alpha \leq 0.05$ dB/km after the test No jacket cracking and fibre breakage
Torsion	IEC 60794-1-21 Method E7	Cable length to be twisted: 1m No. of cycles: 5 Twist angle: starting position to -180° to starting position to +180°, and back (±360°total)	$\Delta\alpha \leq 0.05$ dB/km, No jacket cracking and fibre breakage
Repeated bending	IEC 60794-1-21 Method E6	Sheave Radius: 20 x OD /100N, 35 cycles	No jacket cracking and fibre breakage
Cable bend	IEC 60794-1-21 Method E11	Mandrel radius: 20 x OD / 4 turns / 3 cycles	$\Delta\alpha \leq 0.05$ dB/km, No jacket cracking and fibre breakage

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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 Method F5B	Water head: 1 m Sample length: 3 m Time: 24 hrs	No water leakage

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

OPTICAL FIBRE AND LOOSE TUBES COLOUR IDENTIFICATION

For optical fibres and loose tube identification information please see DSH_Colors_CODE_XXXX document.

FIBRE PARAMETERS

For selected post-production optical fibres parameters please see DSH_OFP document.

MARKING

The following print (inkjet / laser or other suitable method) 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-LXS7 96F SM G652D 8T12F "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.

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