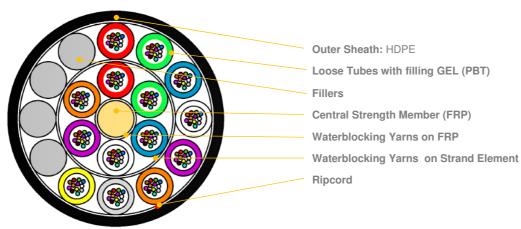
Туре:	Metrojet MK-LX9	REV: 2.4
Issued:	20/08/2015	PB
Modified:	23/12/2020	AM

## MetroJET MK-LX9 Multi Loose Tube microcable (up to 216F)



<sup>\*</sup>schematic drawing, not to scale

#### **APPLICATION:**

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

### STRUCTURE AND COMPOSITION:

HDPE, UV stabilized external jacket with low coefficient of friction Loose tubes (and fillers), SZ stranded around the CSM PBT tubes containing up to 12 optical fibres Smallest outer diameter for blowing into 14/12mm ducts

### **CONSTRUCTION:**

	Quantity [pcs]					Ø nominal	Nominal weight
Variant	Fibres	Fibres per	Total	Active	Fillers	(±5%)	(±10%)
		tube	elements	tubes		[mm]	[kg/km]
14T x 12F	168	12	18	14	4	8.9	62
16T x 12F	192	12	18	16	2	8.9	63
18T x 12F	216	12	18	18	0	8.9	64
*		*Other fibre counts are also available on demand					

APPLICATION:								
Suggested Duct - Ø (min) mm 16/12mm, 14/12mm								
Temperature Range	ture Range Transport & Storage:		- 40 to + 70 °C		Minimum Bending Radius			
	Installation:			- 15 to + 60 ℃		Dynamic:		20 x cable Ø
			Operation:	- 30 to + 70 °C		Static:		10 x cable Ø

MAIN MECHANICAL AND ENVIRONMENTAL CHARACTERISTICS (according to IEC 60794-5)						
Test	Test Standard	Specified Value	Requirement*			
Max Installation Tension	IEC 60794-1-21-E1	750 N	$\Delta\epsilon_f \leq 0.33\%$ , $\Delta\alpha$ reversible			
Max Operation Tension	IEC 60794-1-21-E1	250 N	$\Delta\epsilon_{\text{f}} \leq 0.05\%, \ \Delta\alpha \leq 0.05 \ \text{dB/km}$			
Crush	IEC 60794-1-21-E3	1000 N / 100 mm, max. 15 min	$\Delta\alpha$ reversible, no significant damage			
Impact	IEC 60794-1-21-E4	10 Nm, 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	$\Delta \alpha \leq 0.05 \text{ dB/km}$			
	1EC 00/94-1-22-F1	-30 °C to +70 °C	$\Delta \alpha \leq$ 0.10 dB/km			
Water Penetration	IEC 60794-1-22-F5B	sample=3m, water column=1m, 24h	no water leakage			

<sup>(\*)</sup> values for single-mode fibers, all optical measurements performed at @1550nm



# MetroJET microduct cabling air-blowing system

Type:	Metrojet MK-LX9	REV: 2.4
Issued:	20/08/2015	PB
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#### **FIBRE PARAMETERS**

For selected post-production optical fibres parameters please see DSH\_OFP document.

### **OPTICAL FIBRE AND MODULES COLOUR IDENTIFICATION**

For optical fibres and modules identification information please see DSH Colors CODE XXXX document.

#### MARKING

The following print (ink jet, laser or other suitable method depending on availability) 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-LX9 168F SM G652D 14T12F "YEAR OF MANUFACTURE" "LASER SYMBOL" "LENGTH MARKING" "BATCH NUMBER"

The accuracy of marking is ±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 will be placed on drum's flange.

#### **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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