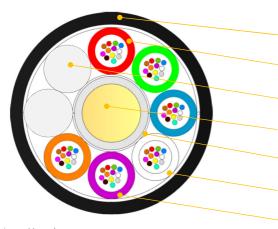
Type:	Metrojet MK-LX7	REV: 2.5
Issued:	20/08/2015	PB
Modified:	23/12/2020	AM

MetroJET MK-LX7 Multi Loose Tube microcable



Outer Sheath: HDPE

Loose Tubes (PBT) with filling compound

Fillers

Central Strength Member (FRP)

Waterblocking Yarns on FRP

Waterblocking Yarns on Stranded Elements

Ripcord

*schematic drawing, not to scale

APPLICATION:

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

DESIGN:

HDPE, UV stabilized external jacket with low coefficient of friction Loose tubes (and fillers), SZ stranded around the CSM PBT loose tubes containing up to 12 optical fibres Smallest outer diameter for blowing into 8mm* (ID) ducts

CONFIGURATIONS:

	Quantity [pcs]					Ø nominal	Nominal weight
Variant	Fibres	Fibres per	Total	al Active	Fillers	(±5%)	(±10%)
	ribles	tube	elements	tubes	Fillers	[mm]	[kg/km]
8T x 4F	32	4	8	8	0	6.7	36
8T x 6F	48	6	8	8	0	6.7	37
8T x 8F	64	8	8	8	0	6.7	38
8T x 12F	96	12	8	8	0	6.7	39
*		*Other fibre counts are also available on demand					

APPLICATION:

Suggested Duct - Ø (min)		16/12mm, 14/12mm, 12/10mm, 14/10mm, 12/8*mm, 10/8*mm					
Temperature Range	Transpor	t & Storage:	- 40 to + 70 °C		Minimum Bending Radius		
	Installation:		- 15 to + 60 ℃		Dynamic:		20 x cable Ø
		Operation:	- 30 to + 70 ℃		Static:		10 x cable Ø

^{*}Blowing distances can be shorter

Main mechanical and environmental characteristics (according to IEC 60794-5)

Test	Test Standard	Specified Value	Requirement*
Max Installation Tension	IEC 60794-1-21-E1	1600 N	$\Delta\epsilon_f \leq 0.33\%$, $\Delta\alpha$ reversible
Max Operation Tension	IEC 60794-1-21-E1	600 N	$\Delta\epsilon_{\text{f}} \leq 0.05\%, \ \Delta\alpha \leq 0.05 \ dB/km$
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	$\Delta \alpha \leq 0.05 \text{ dB/km}$
Temperature Oycling	120 007 94-1-22-1 1	-30 °C to +70 °C	$\Delta \alpha \leq 0.10 \text{ dB/km}$
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

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.



MetroJET microduct cabling air-blowing system

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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-LX7 96F SM G652D 8T12F "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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