

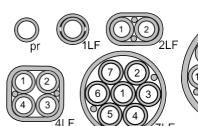
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## Fibre Flow

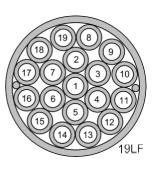
## Low Fire Hazard bundles

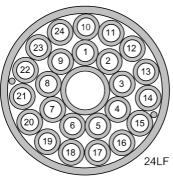
Informal Class  $C_{ca}$ -s1a,d2,a1 (according to EN13501-6:2014) EN61386-22 - 1, 2, 2, 0 for Construction Products Regulation











## **GENERIC PRODUCT DESCRIPTION:**

Assemblies of LFH microducts (m/d) as specification MHT 381 (5/3.5), each with low friction performance for fibre blowing. Each assembly is surrounded with a sheath of LFH material, giving excellent performance in a fire scenario: They are a) Low flammability b) Low smoke c) Low acid/fume

d) Halogen-free. These lightweight, metal-free, flexible products are intended for indoor installation, and may be pulled into suitable indoor ducts using low tensions (listed). They are not for direct burial or aerial use.

## **APPROPRIATE FIBRE TYPES:**

Any suitable sized Lite Access fibre unit: The 5/3.5mm microduct bundles will accommodate all FU counts: 2FU, 4FU, 8FU and 12FU.

## **GENERIC DETAILS: MICRODUCTS (20°C):**

Primary m/d outer diameter, nominal	mm	5.0
Primary m/d inner diameter, nominal	mm	3.5
Diameter of center m/d in 24-way, nom	mm	10
Min bend radius of primary m/d**	mm	50
Mass of primary m/d	g/m	15
Max pull force of primary m/d	N	60

NB: \*\* This radius relates to the microduct capability only, and does not indicate a suitable radius for blowing FU.

- 1. Microduct sizes are compatible with designated connectors
- 2. Max air pressure for blowing, all microducts: 10bar.
- 3. Max blowing temperature 40°C
- 4. Storage of bundles and unprotected m/ds: Indoors and well shielded from daylight

## LFH MICRODUCTS AND SHEATH:

- 1. Extruded from 100% virgin compound with these characteristics:
- 2. Tensile strength 11.5MPa, 102% retention after 7d at 110°CIEC60811-501
- 3. Elongation at break 155%, 94% retention after 7 days at 110°C
- 4. Cold elongation at -25°C minimum 43%
- 5. No halogen content (chlorine, bromine, fluorine)
- 6. Oxygen Index (LOI) 40%



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## **PRODUCT-SPECIFIC DETAILS:**

		5/3.5 m/ds		
	OD	Mass	Min	Max*
	nom	nom	Bend	Pull
type	mm	g/m	Rad	force
			mm	N
1LF	7.2	45	100	150
2LF	7.2/12.2	80	150	250
4LF	12.2/14.3	127	150	400
7LF	17.2	190	220	600
12LF	22.9	310	300	950
19LF	26.9	438	350	1300
24LF	32.5	591	500	1800

<sup>\*</sup> After applying pulling tensions, allow time for the pulled product to relax. See Installation manual.

# MICRODUCT AND ASSEMBLY TESTS: Mechanical

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1.	Crush test:	test method IEC 60794-1-2-E3:	Procedure to IEC 60794-5	
2.	Impact test:	test method IEC 60794-1-2-E4:	Procedure to IEC 60794-5	
3.	Kink test:	test method IEC 60794-1-2-E10:	Procedure to IEC 60794-5	
4.	Flexibility test:	test method IEC 60794-1-2-E11:	Procedure to IEC 60794-5	
5.	Tensile test	test method IEC 60794-1-2-E1:	Procedure to IEC 60794-5	
6.	EN61386-22	Conduit systems for cable management. Particular requirements.		
	Pliable conduit systems	S		

## Fire

EN50575:2014 : Power, control and communication cables – Cables for general applications in construction works subject to reaction to fire requirements.

7. Heat Release: test method EN 50399
8. Vertical Burn test method IEC 60332-1

9. Corrosive gas Emissiontest method BS EN 60754-2:2014

10. Smoke Emission test method BS EN 61034-2:2005

EN13501-6:2014 Fire classification of construction products and building elements.

For further details of tests 7-10 see BRE Global reports P104087-1000-

Note 1: Diameters and thicknesses are measured to the nearest 0.1mm.

Note 2: 'nominal' data is based on middle-spec, and is for information only, not for inspection purposes.

Note 3: Sketches are for information purposes only, and should not be used for inspection.

Note 4: When interpreting performance data and installing m/ds, bundles, or fibre units, it is assumed that the user has been trained by Lite Access Technologies.

Note 5: Users must establish the suitability of these products for their own applications.