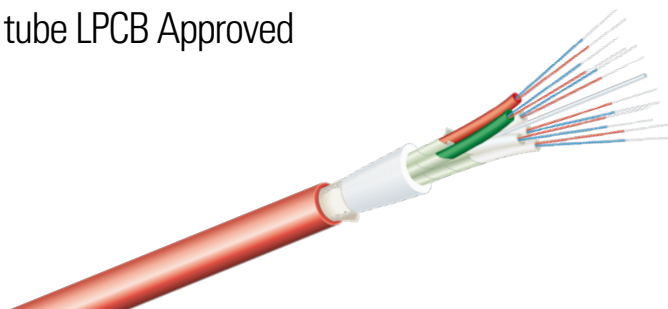


# FIRE RESISTANT LOOSE BUFFERED CABLES

OPTICEL FR - Multi tube LPCB Approved



MLO-000-\*\*-M1-A5-FR



LPCB ref. 217i  
For the scope of the LPCB Approval  
see [www.redbooklive.com](http://www.redbooklive.com)

## FEATURES & APPLICATIONS

- Safety Systems, Critical Connections and Fire Fighting Systems
- Indoor and outdoor installation
- Tunnels and closed areas in general
- Metro and railway station, airport.

LPCB certification ensures constant and maximum control of behavior during a fire, providing the utmost guarantee of reliability and safety.

## TEMPERATURE RANGE

- 40 °C / +70 °C (operating)
- 40 °C / +70 °C (storage)
- 10 °C / +60 °C (installation)

## MINIMUM BENDING RADIUS

- 20 times overall diameter (dynamic)
- 10 times overall diameter (static)

## CABLE CONSTRUCTION

### Fibres

Singlemode and multimode fibres, with loose technology coating.

### Structure

The jelly filled tubes containing the fibres are individually wound with a mica tape, and are cabled around a central FRP (fiberglass reinforced plastic) strength member.

Glass yarn is an additional traction element, and also acts as anti-rodent protection.

A special flame resistant tape improves fire resistance.

The outer jacket is LSZH (M1) compound.

## APPLICABLE STANDARDS

*Optical fibre characteristics* IIEC 60793-1

*Optical fibre cable characteristics* IEC 60794-1

*Fire resistant* IEC 60331-25

*Fire retardant* IEC 60332-3 EN 60332-3

*Flame retardant* IEC 60332-1 EN 60332-1

*Test on gases evolved during combustion* IEC 60744-2 EN 60754-2

*Low smoke emission* IEC 61034-2 EN 61034-2

Type	Max n. of fibres	Tube Diameter (mm)	Diameter (mm)	Weight (kg/km)	Tension load (N)	Crush (N/100mm)
<b>A5 DIELECTRIC ARMoured</b>						
MLO-000-**(n)-M1-A5-FR	48	2.0	10.6	120	3000	3000
MLO-000-**(n)-M1-A5-FR	72	2.0	12.0	130	3000	3000

approximate values