

Applications

Non-metallic optical fibre cable suitable for installation in conduits or ducts.

Sector - BT Optical-Tec®

Multi loose tube cable

Design

1. Multi Loose Tube

PBT,

Containing 12 optical fibres

1.1 Fibre Colour Code

Fibre Colours:(1) Red; (2) Green;
(3) Blue; (4) Yellow; (5) White;
(6) Grey; (7) Brown; (8) Violet; (9) Aqua;
(10) Black; (11) Orange; (12) Pink
(EIA/TIA 598).

1.2 Tube Colour

acc. EIA/TIA 598 – refer to table.

1.3 Filler (where applicable)

Black. Loose buffer tubes without fibres.

2. Water Blocking

Dry yarns and tapes

3. Central Strength Member

FRP rod

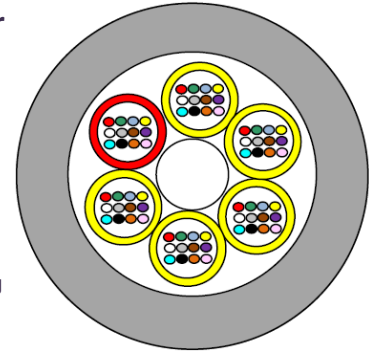
4. Outer Sheath

HDPE, black

Sheath Markings

As per customer requirement.

e.g. Product details and metre marking
BT Cables
Manufacturer Year
Operator Identification
Number of Fibres and Fibres per tube



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Loose Tube Colour Scheme

No. of Fibres	T 1	T 2	T 3	T 4	T 5	T 6	T 7	T 8
12	red	Black*	Black*	Black*	Black*	Black*		
24	red	yellow	Black*	Black*	Black*	Black*		
48	red	yellow	yellow	yellow	Black*	Black*		
60	red	yellow	yellow	yellow	yellow	Black*		
72	red	yellow	yellow	yellow	yellow	yellow	yellow	
96	red	yellow	yellow	yellow	yellow	yellow	yellow	yellow

N.B. Black* - Filler/Loose buffer tube without fibres

Cable Structure, Dimensions and Weights

No. of Fibres	Number of Tubes and Fillers		Number of Fibres per Tube	Nominal Diameter (mm)	Nominal Weight (kg/km)
12	1	5	12	6.4	40
24	2	4	12	6.4	40
48	4	2	12	6.4	40
60	5	1	12	6.4	40
72	6	0	12	6.4	40
96	8	0	12	7.3	50

Mechanical / Environmental Characteristics of Cable

CHARACTERISTIC	Test Specification	REQUIREMENT	VALUE/PERFORMANCE
TENSILE LOAD (MAX.)	IEC 60794-1-E1	- No change in attenuation, before and after load.	700N
CRUSH RESISTANCE	IEC 60794-1-E3	- No attenuation increase	800 N/10cm
IMPACT RESISTANCE	IEC 60794-1-E4	- No attenuation increase	2 J
BENDING RESISTANCE	IEC 60794-1-E11 Proc.1	- No attenuation increase	Bend Radius: 15 X Cable Diameter
TEMPERATURE RANGE	IEC 60794-1-F1	- Operation	-25 °C to + 70 °C
WATER PENETRATION	IEC 60794-1-F5	- 3m Sample of cable with 1m head of water, end fed.	No water leakage in 24 hours under first layer.