



Cable Description	2F to 48F SM FANOUT CABLE
Type of Fibre	Single Mode, G.652D ,G.657A1 & MULTI MODE

**Introduction**

All dielectric optic cable containing SMF. The offered cables are fully compliant to the relevant IEC specifications.

**Cable Design**

- \* High Modulus, Aramid yarn as peripheral strength member
- \* UV Stablized, LSZH Outer sheath, black

**Application**

- \* These cables are specifically designed for indoor/outdoor applications
- \* Mainly used in intra-building backbones
- \* Routing between telecommunications rooms and as a riser cable in Multi Storey buildings

**Special Features**

- \* 900 Microns Tight buffered fibres supports fast field installations
- \* Reduce installation time and costs
- \* Easy jacket removal using standard tools
- \* Flexible and Fire retardant outer sheath with aramid yarns as tensile elements helps in easy installation in space constrained areas
- \* LSZH sheath makes cable suitable for higher fire safety requirement
- \* Small cable diameter & lightweight
- \* Requires no grounding or bonding due to all-dielectric construction

**Cable Physical Characteristics**

Fibre Count	2	4	6	8	12	16	24	32	36	48
Number of Fibres in a Tight Buffer	1									
No of Tight Buffer	2	4	6	8	12	16	24	32	36	48
Cable Diameter (mm)	4.8	5.2	5.7	6.2	7.0	7.5	8.8	9.5	9.8	10.8
Tolerance ± (mm)	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.5
Nominal Cable Weight (kg/km)	20	24	28	32	42	48	65	72	78	94
Standard Length (meters)	2000 ± 10%									

**Cable Mechanical & Environmental Characteristics**

Test	Standard	Product Performance
Temperature Range (°C)	[IEC 60794-1-2-F1]	Operation: -40 °C to +70 °C, Installation: -5 °C to +45 °C & Storage: -40 °C to +70 °C
Cable Bending Radius (mm)	[IEC 60794-1-2-E11 A]	20 x D, D = Cable Diameter
Kink Resistance (mm)	[IEC 60794-1-2-E10]	10 x D, D = Cable Diameter
Tensile Force (N)	[IEC 60794-1-2-E1]	2F to 16F: 500 N, 24F & 32F: 600 N, 36F & 48F: 800 N
Impact Resistance	[IEC 60794-1-2-E4]	Height 0.5 meters, Weight = 0.5 Kg, 3 Nos
Repeated Bending	[IEC 60794-1-2-E6]	30 Cycle, r = 20 X D, 1 Kg Load, D = Cable Diameter
Crush Resistance (N)	[IEC 60794-1-2-E3]	500 N [100 X 100 mm] for 60 sec
Torsion Resistance	[IEC 60794-1-2-E7]	10 Cycle [± 180°] 1 Kg Weight, Length under Test-2 meters

**Note: After the Test, Change in Attenuation shall be ≤ 0.05 dB/Km. No Fibre Break & Damage or Crack on the Cable**

**Cable Transmission Characteristics**

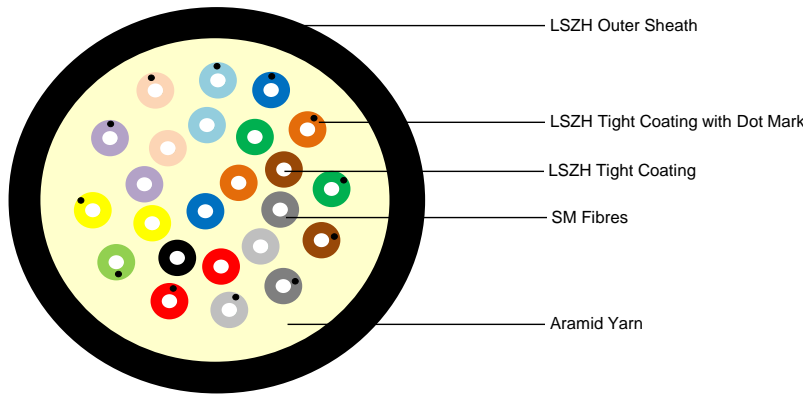
Fibre Type		Attenuation Coefficient (dB/Km)				PMD	Cable Cut-Off	MFD
		850	1300	1310	1550	ps/sqrt.km	nm	µm
Single Mode	G.657A1	-	-	≤ 0.38	≤ 0.25	≤ 0.2	≤ 1260	9.2 ± 0.4
Multi Mode	OM1	≤ 3.5	≤ 1.5	-	-	-	-	-
Multi Mode	OM2	≤ 3.2	≤ 1.2	-	-	-	-	-
Multi Mode	OM3	≤ 3.2	≤ 1.2	-	-	-	-	-
Multi Mode	OM4	≤ 3.0	≤ 1.0	-	-	-	-	-



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Cable Constructional Details

Cable Cross Sectional Diagram of 24F Cable [Drawing not to scale]



Identification Fibre & Tight Buffer Colour

Fibre Colour	Natural														
Tight Buffer colour for 2F Cable	Blue	Orange													
Tight Buffer colour for 4F Cable	Blue	Orange	Green	Brown											
Tight Buffer colour for 6F Cable	Blue	Orange	Green	Brown	Slate	White									
Tight Buffer colour for 8F Cable	Blue	Orange	Green	Brown	Slate	White	Red	Black							
Tight Buffer colour for 12F Cable	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua			
Tight Buffer colour for 16F Cable	without Dot Mark	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua		
	with Black Dot Mark	Blue	Orange	Green	Brown										
Tight Buffer colour for 24F Cable	without Dot Mark	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua		
	with Black Dot Mark	Blue	Orange	Green	Brown	Slate	White	Red	Yellow	Violet	Rose	Aqua			
	with White Dot Mark	Black													
Tight Buffer colour for 32F Cable	without Dot Mark	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua		
	with One Black Dot Mark	Blue	Orange	Green	Brown	Slate	White	Red	Yellow	Violet	Rose	Aqua			
	with One White Dot Mark	Black													
	with Two Black Dot Mark	Blue	Orange	Green	Brown	Slate	White	Red							
	with Two White Dot Mark	Black													
Tight Buffer colour for 36F Cable	without Dot Mark	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua		
	with One Black Dot Mark	Blue	Orange	Green	Brown	Slate	White	Red	Yellow	Violet	Rose	Aqua			
	with One White Dot Mark	Black													
	with Two Black Dot Mark	Blue	Orange	Green	Brown	Slate	White	Red	Yellow	Violet	Rose	Aqua			
	with Two White Dot Mark	Black													
Tight Buffer colour for 48F Cable	without Dot Mark	Blue	Orange	Green	Brown	Slate	White	Red	Black	Yellow	Violet	Rose	Aqua		
	with One Black Dot Mark	Blue	Orange	Green	Brown	Slate	White	Red	Yellow	Violet	Rose	Aqua			
	with One White Dot Mark	Black													
	with Two Black Dot Mark	Blue	Orange	Green	Brown	Slate	White	Red	Yellow	Violet	Rose	Aqua			
	with Three Black Dot Mark	Blue	Orange	Green	Brown	Slate	White	Red	Yellow	Violet	Rose	Aqua			
	with Three White Dot Mark	Black													
Strength Member	Aramid Yarn														
Outer Sheath	LSZH, Black Colour														



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## Technical Data Sheet

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### Proposed Printing Details & Method at every meters

Printing Method & Colour (Can be customised)	Inkjet & White	CABLE ID Customer/Project Name Telephone Symbol, Laser Symbol, Number of Fibres, Type of Fibre Type of Cable YYYY Manufacturer Name Sequential Meter Marking
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### Proposed Stencil on Drum

Every length will be delivered on non-returnable wooden drums. Generally the cable drum flange will be marked with following: (These details can also be customised.)	<ul style="list-style-type: none"><li>* Arrow showing the direction, the drum can be rolled.</li><li>* Country of origin.</li><li>* The manufacturer's name</li><li>* Number of fibers.</li><li>* Nominal cable length in meters</li><li>* Net and gross weight.</li><li>* Drum number</li><li>* Customer's/Project name and destination</li></ul>
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Issue no. & Date	00 & 31.03.2020

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