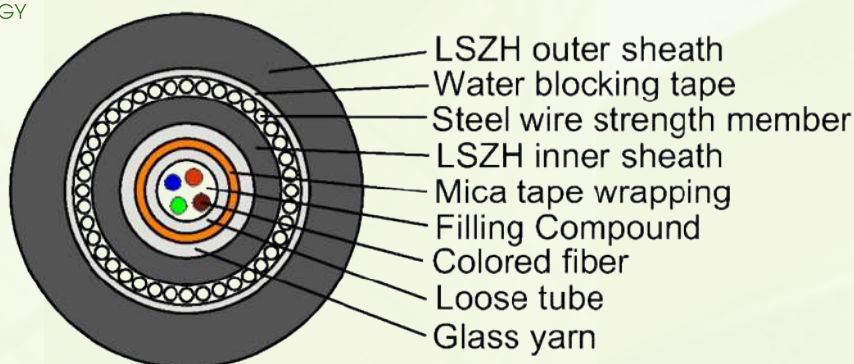


FIBER CABLE

Fiber Cable Steel Wire Armoured Central Tube
Fire Resistant LSZH (Direct Buried)



Structure and Mechanical Specification

Outer Sheath	LSZH with UV resistant $\phi 2.0 \pm 0.1 \text{mm}$
Outer Diameter	$\phi 11.3 \pm 0.2 \text{mm}$
Water Blocking	Water Blocking Tape
Armouring	Galvanised Steel Wire $\phi 1.0 \text{mm} * 19$
Inner Sheath	LSZH $\phi 1.3 \pm 0.1 \text{mm}$
Protection	Rodent resistance and longitudinal water protection by Glass Yarns
Protection	Fire barrier by Mica Tape helically surrounded central loose tube
Loose Tube	PBT (Polybutylene Terephthalate) $\phi 2.6 \text{mm}$ jelly filled
No of Fiber Per Tube	Depending of number of cores required
No of Fiber	4,6,8,12 Core
Optical Fiber Glass	Singlemode 9/125um (OS1), Multimode 62.5/125um (OM1), Multimode 50/125um (OM2)

Geometrical Parameters

Fiber/Glass Type	MM(62.5 μm)	MM(50 μm)	SM(9 μm)
Core Diameter	62.5 μm	50 μm	9 μm
Mode Field Non-Circularity(MFD)	-	-	<0.5 μm
Core/Cladding Concentricity Error	$\leq 2\mu\text{m}$	$\leq 2\mu\text{m}$	$\leq 0.6\mu\text{m}$
Cladding Diameter	125 $\mu\text{m} \pm 2.0$	125 $\mu\text{m} \pm 2.0$	125 $\mu\text{m} \pm 2.0$
Cladding Non circularity	$\leq 2.0\%$	$\leq 2.0\%$	1.00%
Coating/cladding Concentricity	$\leq 12\mu\text{m}$	$\leq 12\mu\text{m}$	$\leq 12\mu\text{m}$
Primary Coating Diameter	<2.0%	<2.0%	<1.0%
Numerical Aperture	0.275 ± 0.015	0.275 ± 0.015	-

Transmission Parameters Of Fibers

Fiber/Glass Type	MM(62.5 μm)	MM(50 μm)	SM(9 μm)
Operating Wave Length	850/1300nm	850/1300nm	1310/1550nm
Band width(MHz.Km)	$\geq 160/500$	$\geq 200/500$	-
Attenuation(db/Km)	3.50/1.50	3.50/1.50	0.45/0.30
Polarization Mode	-	-	$\leq 0.2 \text{ps}/(\text{km})$
Dispersion(PMD)	-	-	-
Cut Off Wave Length	-	-	$\leq 1260 \text{nm}$

Mechanical/Electrical/ Environment Characteristic

Tensile	2500N - Conform to IEC 794-1-E1
Crush Resistance	Short term : 3000N/100mm Long term : 1000N/100mm
Water Penetration Test	IEC 794-1-F5
Filling Drip/leak Test	IEC 794-1-2-E14
Compressive Load Resistive Test	IEC 794-1-E3
Mechanical Flexure Test	IEC 794-1-E11
Flame Retardant	LSZH IEC-60332-1
Attenuation, Return loss	Optical Time-Domain Reflectometer (OTDR)
Bending Radius	15*Cable Diameter (Long term) 30*Cable Diameter (Short term)
Impact Resistance	20 times - Conform to IEC 794-1-E4
Temperature	-40 °C ~ + 70°C (Operating) -50 °C ~ + 70°C (Storage)

Fiber Colour Code

Core number	Colour	Core number	Colour
1	Blue	7	Red
2	Orange	8	Black
3	Green	9	Yellow
4	Brown	10	Purple
5	Grey	11	Pink
6	White	12	Aqua

Fiber Loose Tube

Loose Tube No	1	2	3	4	5
Colour	Blue	Orange	Green	Brown	Filler(White)