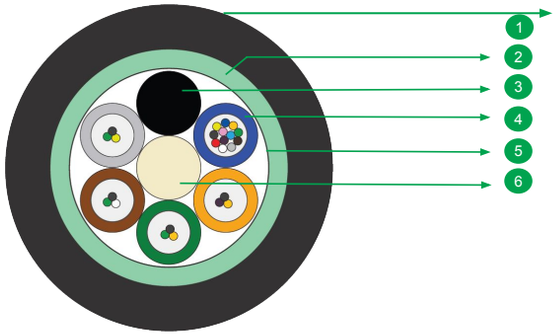
Product Specification

24F Single Sheath Metallic Armour Optical Fibre Cable



1 POLYETHYLENE OUTER SHEATH
2 CORRUGATED STEEL TAPE
3 FILLER
4 GEL FILLED TUBE
5 WATER BLOCKING TAPE
6 STRENGTH MEMBER

** Typical construction diagram - Not to scale*

Features & Benefits

- Steel tape armoring and PE outer jacket offer strong protection against rodents.
- Enhanced crush and impact resistance ensures durability in tough environments.
- Steel tape layer allows easy cable detection after installation.
- Gel-free dry water-blocking technology enables faster, cleaner cable preparation.
- Rugged thermoplastic outer jacket is easy to strip and remove.
- High tensile strength supports reliable performance under mechanical stress.
- Suitable for underground and direct-burial applications requiring added protection.
- All components designed for long-term performance and ease of installation.

Product Details

24F Single Sheath Metallic Armour Optical Fibre Cable is a high-performance optical cable designed to deliver reliable connectivity in a variety of installation environments. Built with a robust steel tape armouring and a protective polyethylene jacket, this cable is ideal for underground deployments where mechanical protection and rodent resistance are critical. Its sturdy construction allows it to be installed directly into the ground using trenching methods or advanced blowing techniques, making it well-suited for rapid deployments in both urban and rural settings. Additionally, the cable is optimized for duct applications, supporting smooth installation through either pulling or air-assisted blowing, depending on the site conditions. The inclusion of dry water-blocking elements ensures a gel-free core, reducing cable preparation time and simplifying splicing and termination. Whether it's used in direct burial projects or routed through protective ducts, the 24F Single Sheath Metallic Armour Optical Fibre Cable delivers consistent performance, long-term durability, and ease of handling, making it a dependable choice for high-speed data transmission networks.

Fibres and Cable Performance Standards

Cable complies to the following standards IEC 60793,IEC 60794, ITU-T

Printing Details

STERLITE 12F NOVA + 12F MCF ARMOUR LASER SYMBOL TELEPHONE SYMBOL YEAR OF MANUFACTURE LENGTH CODE METER MARKING

Note: The accuracy of marking shall be + 0.5%. Occasional loss of printing & remarking shall be as per Bell core GR 20 and this supersedes the earlier markings.

Specifications

Physical Characteristics	
Fibre Count	24
Fibre Type	12 Nos. of NOVA Fibres + 12 Nos. of MCF Fibres
Maximum Cabled Attenuation (dB/km)	1310nm : 0.4 & 1550nm : 0.3
Individual PMD (ps/sqrt.km)	</= 0.2
PMD LDV (ps/sqrt.km)	</= 0.1
Fibres per Tube	Nova – 12F / T MCF – 3F / T
Fibre Color Sequence	Blue,Orange,Green,Brown,Slate,White,Red,Black,Yellow,Violet,Pink,Aqua
Central Strength Member	FRP (Fibre Reinforced Plastic)
No of Tubes in Layer 1	5
Tube Color Sequence	Nova :Blue, MCF :Orange, Green, Brown, Slate, Filler
No.of Fillers	1
Filler Material	Thermoplastic Material
Metallic Armoring	Corrugated Steel Tape

Mechanical & Environmental Characteristics		
Cable Characteristics	**Testing Standard**	**Cable Performance**
Tensile Strength (N)	IEC-60794-1-21-E1	2000
Crush Resistance (N/100 mm)	IEC-60794-1-21-E3	3000
Impact Strength(Nm)	IEC-60794-1-21-E4	5
Torsion	IEC-60794-1-21-E7	±180º
Min. Bend Radius (During Installation)	IEC-60794-1-21-E11	20 D
Min. Bend Radius (After Installation)	IEC-60794-1-21-E11	15 D
Repeated Bending	IEC-60794-1-21-E6	20 D
Water Penetration Test	IEC-60794-1-22-F5	1m waterhead, 3m samples, 24 h
Drip Test	IEC-60794-1-21-E14	30 cm, 70ºC, 24 h
Temperature Performance	IEC-60794-1-22-F1	
Installation		-10ºC to +70ºC
Operation		-40ºC to +70ºC
Storage		-40ºC to +70ºC

Note: All tests shall be carried out as per IEC standards. Change in attenuation after and before testing shall be </= 0.05 dB/ km for Single Mode fibre.

Packing and Lengths

Drum Type	Length Multiple (km)	Short Lengths	Order Tolerance
Wooden Drums	4 ± 5%	Max 5%, Customer Approval	± 5%

For additional information please contact your sales representative.
You can also visit our website at **www.stl.tech**