



UN LINK

PRODUCT DATA SHEET

1. Construction Details

Component	Description
Conductor	Solid Bare Copper, 24 AWG (0.51mm ± 0.03mm)
Insulation	High-Density Polyethylene (HDPE)
Pairing	2 Insulated Conductors Twisted Together (4 Pairs Total)
Individual Shield	Aluminum Foil Shield on Each Pair
Overall Shield	Braided Aluminum Shield (65% Coverage)
Separator	Cross Filler / PE Spine (Optional, for Cat 6A)
Drain Wire	Tinned Copper, 24 AWG (optional for grounding)
Jacket	PVC or LSZH (Low Smoke Zero Halogen)
Overall Diameter	7.5mm ± 0.6mm (Typical for Cat 6A S/FTP)
Color	As per customer requirement

2. Electrical Characteristics

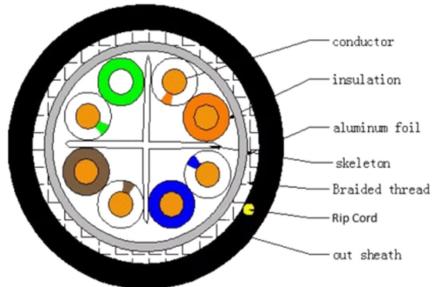
Parameter	Value
Impedance	100 ± 15 ohms
Capacitance	Max. 5.6 nF/100m
DC Resistance	Max. 9.38 ohms/100m
Resistance Unbalance	Max. 5%
Pair-to-Ground Cap. Unbalance	Max. 330 pF/100m
Propagation Delay	Max. 45 ns/100m
Delay Skew	Max. 25 ns/100m

3. Transmission Performance (at 500 MHz)

Frequency (MHz)	Insertion Loss (dB)	NEXT (dB)	PSNEXT (dB)	ACR (dB)	Return Loss (dB)
1	2.0	65.3	63.3	63.3	20.0
100	21.9	44.3	42.3	22.4	14.0
250	35.7	39.8	37.8	4.1	12.0
500	53.8	35.3	33.3	-18.5	10.0

4. Standards Compliance

- ISO Standard
- ANSI/TIA-568.2-D (Cat 6A)
- CE Compliant
- Fire Retardant Jacket Options: LSZH / FRPVC



5. Applications

- 10GBASE-T Ethernet
- PoE / PoE+ / PoE++
- Voice / Video / Data Transmission
- High-Speed Networking for Data Centers



6. Packaging

Option	Details
Standard Length	305m (1000ft) (+/- 5%)
Packaging	Wooden Reel / Pull Box
Marking	Sequential meter marking
Color	Available in Grey/Black Color