



Category 6 S/FTP - Shielded Foiled Twisted Pair PVC Cable

The Category 6 Shielded Foiled Twisted Pair (S/FTP) PVC cable with 4 x 2 x 23 AWG copper wire structure fully complies with ISO/IEC and TIA/EIA 568 standards. It is designed for use in horizontal network installations up to 250MHz. OptronicsPlus Cat6 S/FTP cable exceeds Cat6/Class E performance requirements and supports 10-BASE-T, 100-BASE-TX and 1000Base-T applications. It is available with PVC outer jacket.

Features

- 23 AWG conductors
- Exceeds Cat6 performance requirements
- ISO/IEC 11801 and TIA/EIA568 compliant
- Available with PVC outer jacket
- Supplied in 305m or 500m reels
- Printed metre marks

Applications

- Cat6/Class E up to 250Mhz applications
- 10BASE-T, 100BASE-TX, 1000Base-T applications
- Ideal for indoor/outdoor applications
- Horizontal network installations
- Backwards compatible with Cat 5e distribution systems

Specifications

CONSTRUCTION

Conductor	23AWG solid bare copper (0.570 ± 0.008 mm)
Insulation	
Material	FOPE
Nom. OD.	1.38 ± 0.1 mm
Minimum Thickness	0.39mm
Outside-Tape Wrap Material	AL-MYLAR
Braid Material	
Material	LMS
Nom. OD.	16/6/0.10 ± 0.01mm
Sheath	PVC
Average Thickness	0.60 ± 0.05 mm
Diameter	7.60mm ± 0.35mm
Colour	Optional
Sheath Normal Temp Tensile Strength (Mpa)	≥13.5
Sheath Normal Temp Elongation (%)	≥150
Insulation Normal Temp Tensile Strength (Mpa)	≥10
Insulation Normal Temp Elongation (%)	≥200
Aging Condition (°C×Hrs)	100°C ± 2°C, 24h, 7d
Sheath After Aging Tensile Strength (Mpa)	≥12.5
Sheath After Aging Elongation (%)	≥125
Temperature Rating (°C)	-20°C - + 75°C
Cold Bend (-20 ± 2°C × 4)	8 × Cable O.D. No visible cracks
Characteristic Impedance (Ω)	100 ± 15
Propagation Delay (Ns/100m)	≤ 45
Direct Current Resistance 20°C (Ω/100m) Max	9.5
Direct Current Resistance Unbalance (%) Max	Internal pair: 2%、 Between pairs: 4%
Insulation Resistance (Mω Km)	≥ 5000
Mutual Capacitance of a Pair (Nf/100m)	Not required
Capacitance Unbalance (Pf/100m)	≤ 160

Transmission Line Performance At 20°C

FREQUENCY MHZ	RL ≥dB	ATT ≤dB	NEXT ≥dB	ACRF ≥dB	PS NEXT dB	PS ACRF dB
4	23.0	3.8	66.3	56.0	63.0	53.0
8	24.5	5.3	61.8	49.9	58.8	46.9
10	25.0	6.0	60.3	48.0	57.3	45.0
16	25.0	7.6	57.2	43.9	54.2	40.9
20	25.0	8.5	55.8	42.0	52.8	39.0
25	24.3	9.5	54.3	40.0	51.3	37.0
31.25	23.6	10.7	52.9	38.1	49.9	35.1
62.5	21.5	15.4	48.4	32.1	45.4	29.1
100	20.1	19.8	45.3	28.0	42.3	25.0
200	18.0	29.0	40.8	22.0	37.8	19.0
250	17.3	32.8	39.3	20.0	36.3	17.0

Standards Compliance

- Class E / Category 6
- ISO/IEC 11801 2nd Edition
- ANSI/TIA/EIA-568-C.2
- EN 50173
- ETL, CPR verified
- RoHS
- REACH

Ordering Information

DESCRIPTION	PART NUMBER
Category 6 S/FTP PVC Cable Grey - 305m Reel	OCC-6-42-305
Category 6 S/FTP PVC Cable Grey - 500m Reel	OCC-6-42-500

Additional Images

