



Category 6A F/UTP - Foiled Unshielded Twisted Pair PVC Cable

The Category 6A Foiled Unshielded Twisted Pair (F/UTP) 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 500MHz. OptronicsPlus Cat6a F/UTP cable exceeds Cat6A/Class EA performance requirements and support 10G-BASE-T, 2G FCBASE-T, 4G FC-BASE-T and 1000Base-T applications. It is available with PVC outer jacket.

Features

- 23 AWG conductors
- Exceeds Cat6A performance requirements
- ISO/IEC 11801 and TIA/EIA568 compliant
- Available with PVC outer jacket
- Supplied in 305m or 500m reels
- Printed metre marks

Applications

- Cat6a/Class EA up to 500Mhz applications
- 1000BASE-T, 2G FCBASE-T and 10GBASE-T applications
- Horizontal network installations
- Backwards compatible with Cat 5e and Cat6 distribution systems

Specifications

CONSTRUCTION

Conductor	23AWG solid bare copper (0.570 ± 0.01 mm)
Insulation	
Material	FOPE
Nom. OD.	1.15 ± 0.05 mm
Minimum Thickness	0.29mm
Outside-Tape Wrap Material	MYLAR
Drain Wire	
Material	Tinned solid copper
Nom. OD.	1/0.404 ± 0.007mm
Outside Tape Wrap	AL-MYLAR
Sheath	PVC
Average Thickness	0.50 ± 0.10 mm
Diameter	7.70mm ± 0.40mm
Colour	Optional

PHYSICAL CHARACTERISTICS

Sheath Normal Temp Tensile Strength (Mpa)	≥10.0
Sheath Normal Temp Elongation (%)	≥125
Insulation Normal Temp Tensile Strength (Mpa)	≥16
Insulation Normal Temp Elongation (%)	≥300
Aging Condition (°C×Hrs)	100°C ± 2°C, 24h, 7d
Sheath After Aging Tensile Strength (Mpa)	≥8.0
Sheath After Aging Elongation (%)	≥100
Temperature Rating (°C)	-20°C to +75°C
Cold Bend (-20 ± 2°C × 4)	8 × Cable O.D. No visible cracks

ELECTRICAL CHARACTERISTICS

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

FREQUENCY (MHZ)	RL ≥dB	ATT ≤dB	NEXT ≥dB	ACRF ≥dB	PS NEXT dB	PS ACRF dB
4	19.0	4.2	63.0	51.2	60.5	48.2
8	19.0	5.8	58.2	45.2	55.6	42.2
10	19.0	6.5	56.6	43.3	54.0	40.3
16	18.0	8.2	53.2	39.2	50.6	36.2
20	17.5	9.2	51.6	37.2	49.0	34.2
25	17.0	10.2	50.0	35.3	47.3	32.3
31.25	16.5	11.5	48.4	33.4	45.7	30.4
62.5	14.0	16.4	43.4	27.3	40.6	24.3
100	12.0	20.9	39.9	23.3	37.1	20.3
200	9.0	30.1	34.8	17.2	31.9	14.2
250	8.0	33.9	33.1	15.3	30.2	12.3
300	6.6	40.6	30.3	12.4	27.3	9.4
450	6.0	46.5	27.3	10.2	24.4	7.2
500	6.0	49.3	26.1	9.3	23.2	6.3

Standards Compliance

- Class EA / Category 6A
- ISO/IEC 11801 2nd Edition
- ANSI/TIA/EIA-568-C.2
- EN 50173
- IEC 61156-5
- EN 50288-3-1
- IEC 60332-1-2
- RoHS
- REACH

Ordering Information

DESCRIPTION	PART NUMBER
Category 6A F/UTP PVC Cable - 305m Reel	OCC-6A-22-305
Category 6A F/UTP PVC Cable - 500m Reel	OCC-6A-22-500

Additional Images

