



## Category 7 S/FTP - Shielded Foiled Twisted Pair PE Cable

The Category 7/Class F Shielded Foiled Twisted Pair (S/FTP) cable with 4 x 2 x 23 AWG copper wire structure fully complies with ISO/IEC standards. It is designed for use in horizontal network installations up to 600MHz. OptronicsPlus Cat7/Class F S/FTP cable exceeds Class F performance requirements It is available with PE outer jacket.

### Features

- 23 AWG conductors
- Exceeds Class F performance requirements
- ISO/IEC 11801 compliant
- Available with PE outer jacket
- Supplied in 305m or 500m reels
- Printed metre marks

### Applications

- Cat7/Class F up to 600Mhz applications
- Horizontal network installations
- Backwards compatible with Cat5e, Cat6 and CAT6A distribution systems

## Specifications

### CONSTRUCTION

Conductor	23AWG solid bare copper (0.580 ± 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	PE
Average Thickness	0.60 ± 0.05 mm
Diameter	7.60mm ± 0.35mm
Colour	Optional

### PHYSICAL CHARACTERISTICS

Sheath Normal Temp Tensile Strength (Mpa)	≥14.0
Sheath Normal Temp Elongation (%)	≥600
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)	≥10.0
Sheath After Aging Elongation (%)	≥400
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

MHZ	RL ≥dB	ATT ≤dB	NEXT ≥dB	ACRF ≥dB	PS NEXT dB	PS ACRF dB
4.00	23.0	3.7	78.0	78.0	75.0	75.0
8.00	24.5	5.2	78.0	77.2	75.0	74.2
10.0	25.0	5.9	78.0	75.3	75.0	72.3
16.00	25.0	7.4	78.0	71.2	75.0	68.2
20.00	25.0	8.3	78.0	69.3	75.0	66.3
25.00	24.3	9.3	78.0	67.3	75.0	64.3
31.25	23.6	10.4	78.0	65.4	75.0	62.4
62.50	21.5	14.9	75.5	59.4	75.0	56.4
100.00	20.1	19.0	72.4	55.3	72.5	52.3
200.00	18.0	27.5	67.9	49.3	69.4	46.3
250.00	17.3	31.0	66.4	47.3	64.9	44.3
300.00	17.3	34.2	65.2	45.8	62.2	42.8
400.00	17.3	40.0	63.4	43.3	60.4	40.3
500.00	17.3	45.3	61.9	41.3	58.9	38.3
600.00	17.3	50.1	60.7	39.7	57.7	36.7

## Standards Compliance

- Class F
- ISO/IEC 11801 2nd Edition
- EC 61156-5:2009 (Ed. 2.0)
- EN 50173-1:2011
- EN 50173-2:2007 including amendment A1:2010
- EN 50288-4-1:2003
- IEC 60332-1-[1,2]:2004
- IEC 60754-[1,2]
- IEC 61034-[1,2]
- RoHS
- REACH / SvHC

## Ordering Information

DESCRIPTION	PART NUMBER
Category 7 S/FTP PE Cable Black - 305m Reel	OCC-7-43-305
Category 7 S/FTP PE Cable Black - 500m Reel	OCC-7-43-500

## Additional Images

