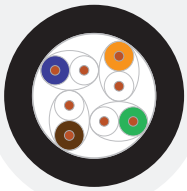

EC500 Cat 6A S/FTP PE F_{ca}

RoHS Compliant CE CPR COMPLIANT

Application

10Base-T, 100Base-T, 1000Base-T, 10GBase-T, and Filedbus systems. Applicable for Power over Ethernet PoE / PoE+

Cable Construction

- 23 AWG Bare Copper
- Skin/Foam/Skin PE Insulation
- Al-Pet Foil 100% Coverage
- Tinned Copper Wire Braiding
- Ø 7.10 ± 0.20 mm PE

Technical Properties

Cable Weight	49 kg/km
Copper Weight	21.9 kg/km
Min. Bending radius during draw in	60 mm
Min. Bending radius permanently installed	30 mm
Max. Tensile Strength	90 N
Min. Crush Resistance	1000 N/10 cm
Min. Impact	10 Impacts
Installation Temperature	0°C ... +50°C
Operating Temperature	-20°C ... +70°C
Packing	305 / 500 m

Electrical Properties at 20 °C

Max. Conductor Resistance	< 9.5 Ω / km
Max. Resistance Unbalance	< 2%
Min. Insulation Resistance	5000 MΩ x m
Mutual Capacitance	< 56 pF / m
Capacitance Unbalance	1600 pF / km
Impedance at 100 MHz	100 ± 5 Ω
Velocity of Propagation	76 %
Delay Skew	< 25 ns / 100 m
Coupling Attenuation	> 70 dB
Segregation Class	C
Transfer Impedance 1/10/30 MHz	< 10/10/30 mΩ/m
Test Voltage	1000 V
Operating Voltage	125 V

Standards

EIA/TIA-568
ISO/IEC 11801 Class F
IEC 61156-5, EN 50173-1
EN 50288-4-1

Euro Class
F_{ca}

Electrical Data (Nominal) @ 20 °C

Frequency (MHz)	Attenuation (dB/100 m)	NEXT (dB)	PS - NEXT (dB)	ACR (dB/100 m)	PS-ACR (dB/100 m)	ACRF (dB/100 m)	PS-ACRF (dB/100 m)	Return Loss (dB)
1	2.0	95	92	90	87	100	97	25
4	3.6	95	92	90	87	100	97	25
10	5.4	95	92	85	82	90	87	28
100	18.3	87	84	75	72	75	72	25
200	25.0	87	84	75	72	70	67	25
250	29.1	85	82	52	49	65	62	23
400	37.4	75	72	41	48	55	52	23
500	41.5	75	72	30	27	55	52	21