



EC250 Slim Cat 6 U/UTP PE F_{ca}

Application

10Base-T, 100Base-T, 1000Base-T, and Fieldbus systems. Applicable for Power over Ethernet (PoE) / PoE+

Cable Construction

- 23 AWG Bare Copper
- PE Insulation
- Pair Separator
- Ø 5.60 ± 0.20 mm PE

Technical Properties

Cable Weight	33 kg/km
Copper Weight	17.3 kg/km
Min. Bending radius during draw in	50 mm
Min. Bending radius permanently installed	25 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

Max. Conductor Resistance	< 9.5 Ω / km
Max. Resistance Unbalance	< 2%
Min. Insulation Resistance	5000 MΩ x m
Mutual Capacitance	< 60 pF / m
Capacitance Unbalance	1600 pF / km
Impedance at 100 MHz	100 ± 5 Ω
Velocity of Propagation	66 %
Delay Skew	< 45 ns / 100 m
Test Voltage	1000 V
Operating Voltage	125 V

at 20 °C

Standards

EIA/TIA-568
 ISO/IEC 11801 Class E
 IEC 61156-5, EN 50173-1
 EN 50288-6-1
 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	83	80	85	82	83	80	25
4	3.6	73	70	70	67	70	67	31
10	6.0	73	70	65	62	60	57	30
100	19.5	55	52	40	37	35	32	25
200	28.5	50	47	25	22	30	27	22
250	32.0	45	42	25	22	22	19	22