



## EC400 Cat 6 SF/UTP

### 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
- Al-Pet Foil 100% Coverage
- Tinned Copper Wire Braiding
- $\varnothing 7.10 \pm 0.20$  mm  
PVC, LSZH or PE

### Standards

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

### Technical Properties

Copper Weight	24.4 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 $\Omega$ / km
Max. Resistance Unbalance	< 2%
Min. Insulation Resistance	5000 M $\Omega$ x m
Mutual Capacitance	< 60 pF / m
Capacitance Unbalance	1600 pF / km
Impedance at 100 MHz	100 $\pm$ 5 $\Omega$
Velocity of Propagation	67 %
Delay Skew	< 45 ns / 100 m
Coupling Attenuation	> 70 dB
Segregation Class	C
Transfer Impedance at 1/10/30MHz	<10/10/30 m $\Omega$ /m
Test Voltage	1000 V
Operating Voltage	125 V

### 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
300	33.0	40	37	15	12	20	17	22
400	39.0	40	37	7	4	20	17	20

Product Name	Euro Class (CPR)	Flame Retardancy	Corrosive Gases Test	Smoke Density	Cable Weight
EC400 Cat 6 SF/UTP LSZH D <sub>ca</sub>	D <sub>ca</sub>	EN 60332-1-2	EN 50267-2-3	EN 61034-2	65
EC400 Cat 6 SF/UTP LSZH E <sub>ca</sub>	E <sub>ca</sub>	EN 60332-1-2	EN 50267-2-3	EN 61034-2	65
EC400 Cat 6 SF/UTP PVC E <sub>ca</sub>	E <sub>ca</sub>	EN 60332-1-2	N/A	N/A	63
EC400 Cat 6 SF/UTP PE F <sub>ca</sub>	F <sub>ca</sub>	N/A	N/A	N/A	53