



F/UTP 6A

4x2x23 AWG - PVC sheath

Eca

4PPoE

PVC

1. **Conductor:** 100% copper solid wire
2. **Insulation:** PE compound
3. **Twisting:** 2 cores twisted in a pair
4. **Earth wire:** tinned copper wire
5. **Screen:** overlapped laminated aluminium foil
6. **Separating cross element:** MDPE compound
7. **Outer jacket:** Grey PVC

Description:

Data transmission cable F/UTP cat. 6A, with PVC sheath.

Application:

Installation cables for structured horizontal cabling. These cables are ideal for LAN data transmission in all Ethernet (IEEE802.3) applications up to 1000Base-T. The foil screen prevents electromagnetic interference making them suitable for use in industrial environments. Comply with IEEE 802.3bt 4PPoE.

Fire behavior:

IEC 60332-1-2
Eca DoP

Basic electrical characteristics (20°C)

DC Conductor Resistance	≤ 80 Ohm/km
Insulation Resistance	≥ 5000 MΩ·Km / 500 VDC
Mutual Capacitance	50 ± 3 nF / km / 10 KHz
Capacitance pair to ground	≤ 500 pF / km / 10 KHz
Characteristic Impedance	100 ± 15% Ω / 1 - 100 MHz
	100 ± 18% Ω / 100 - 250 MHz
Velocity of Propagation	66% nom.
Operating Voltage	100 V max.
Dielectric Strength	1000 Volts / 1 minute DC
Coupling attenuation	> 55 dB @ 30 - 500 MHz

Operating conditions

Temperature range	Static	-20°C to +60°C
	Dynamic	-0°C to +50°C
Bending radius	Static	4 x D
	Dynamic	8 x D

Dimensions

Outer Diameter	75 ± 0.2 mm
Cable weight	52 kg/km

Basic transmission characteristics (20°C)

Frequency MHz	Attenuation dB/100m		NEXT dB		ELFEXT (dB/100m)		Return loss dB	
	CAT 6A max.	HELLENIC CABLES	CAT 6A min.	HELLENIC CABLES	CAT 6A min.	HELLENIC CABLES	CAT 6A min.	HELLENIC CABLES
1	21	19	75	90	68	86	20.0	30
4	38	36	66	79	56	79	23.0	29
10	59	56	60	76	48	76	25.0	33
16	75	70	57	72	44	68	25.0	30
31.25	105	99	53	67	38	64	23.6	29
62.5	150	140	48	63	32	58	21.5	27
100	191	178	45	62	28	52	20.1	26
250	311	284	39	57	20	49	17.3	25
300	343	312	37	51	18	44	16.8	30
500	453	391	34	46	14	41	15.2	21

Standards: IEC 61156-5, ISO/IEC 11801, EN 50173-1, EIA/TIA 568C.2