



F/UTP 6

4x2x23 AWG - PE sheath

Fca

4PPoE

PE

- 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:** Black PE

Description:

Data transmission cable F/UTP cat. 6, tested up to 350MHz, with PE 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:

Fca 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	74% nom.
Operating Voltage	100 V max.
Dielectric Strength	1000 Volts / 1 minute DC
Coupling attenuation	> 55 dB @ 30 - 250 MHz

Operating conditions		
Temperature range	Static	-30°C to +70°C
	Dynamic	-10°C to +50°C
Bending radius	Static	4 x D
	Dynamic	8 x D

Dimensions	
Outer Diameter	75 ± 0.2 mm
Cable weight	48 kg/km

Basic transmission characteristics (20°C)								
Frequency MHz	Attenuation dB/100m		NEXT dB		ELFEXT (dB/100m)		Return loss dB	
	CAT 6 max.	HELLENIC CABLES	CAT 6 min.	HELLENIC CABLES	CAT 6 min.	HELLENIC CABLES	CAT 6 min.	HELLENIC CABLES
1	21	19	75	90	68	86	20.0	30
4	3.8	3.6	66	79	56	79	23.0	29
10	6.0	5.6	60	76	48	76	25.0	33
16	7.6	7.0	57	72	44	68	25.0	30
31.25	10.7	9.9	53	67	38	64	23.6	29
62.5	15.5	14.0	48	63	32	58	21.5	27
100	19.9	17.8	45	62	28	52	20.1	26
250	33.0	28.4	39	57	20	49	17.3	25
300	-	31.2	-	51	-	44	-	30
350	-	35.3	-	46	-	41	-	25

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