

Category 6 F/UTP 23AWG 400MHz LSZH Data Cable | Dca



Category 6 class cables are designed for analog and digital signal transmission in voice, video and data applications in supported data communication systems up to 250 MHz. Cables meet the requirements of structural cabling standards including ANSI EIA/TIA 568, ISO/IEC 11801 and EN 50173 Class E. Foam-skin insulation technology is used on the pairs.

Compliant Standards

ANSI TIA/EIA 568.2-D
ISO/IEC 11801 2nd ed., IEC 61156-5
EN 50173-1, EN 50288-5-1

Applications

IEEE 802.3: 10Base-T; 100Base-T; 1000Base-T
IEEE 802.5 16 MB; ISDN; TPDDI; ATM
Power over Ethernet (PoE) / PoE+

EU Declaration

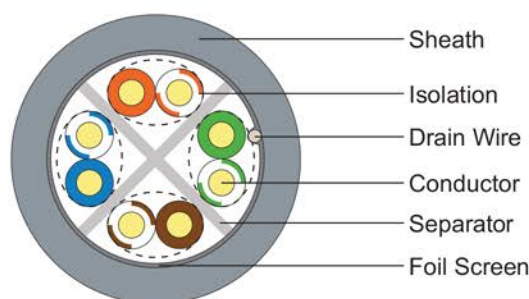
LVD:	Low Voltage Directive	2014/35/EU
RoHS:	Restriction of Hazardous Substances Directive	2011/65/EU

Flame Resistance

Flame Performance	Flame Retardancy	EN 60332-1-2
	Smoke Performance	EN 61034-2
	Halogen Acidity	EN 60754-1/2
Euro-class	Dca - s2, d2, a1	EN 13501-6:2018

Cable Construction

Conductor	Bare copper wire 23 AWG
Insulation	Polyolefin
Outer cable diameter	7.2 mm
App. Cable Weight	55 kg/km
Outer Sheath	LSZH - Low Smoke Zero Halogen
Color (standard)	Grey RAL 7001



Mechanical Properties

Min. Bending Radius	Installation:	8 x D
	Operation:	4 x D
Temperature Range	Installation:	0°C up to + 50°C
	Operation:	-20°C up to + 60°C
Tensile Strength	100 N	max.
Crush Resistance	1000 N/dm	min.
Impact Resistance	10 Impact	

Electrical Properties

Conductor Resistance	85.0 Ω/km	max.
Resistance Unbalance	2%	max.
Insulation Resistance	5000 MΩ x m	min.
Capacity	50 pF/m	nom.
Capacity Unbalance	1600 pF/km	max.
Characteristic Impedance	100±5 Ohm	@ 100 MHz
Nominal Velocity of Propagation	67-69%	
Propagation Delay	537 ns/100m	max.
Delay Skew	45 ns/100m	max.
Test Voltage	1000 V	

Transmission Properties

Frequency (MHz)	Attenuation (dB/100m)		NEXT (dB)		PS-NEXT (dB)		ACR (dB/100m)		PS-ACR (dB/100m)		ACR-F (dB/100m)		PS-ACR-F (dB/100m)		Return Loss (dB)	
	max.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.	min.	nom.
1.00	2.1	1.9	66.0	82.0	64.0	79.0	63.9	80.0	61.9	77.0	66.0	85.0	64.0	82.0	20.0	26.0
4.00	3.8	3.8	65.3	76.0	63.3	73.0	61.4	72.0	59.4	69.0	58.0	77.0	55.0	74.0	23.0	31.0
10.00	6.0	5.9	59.3	70.0	57.3	67.0	53.3	64.0	51.3	61.0	50.0	68.0	47.0	64.0	25.0	32.0
16.00	7.6	7.4	56.2	65.0	54.2	62.0	48.6	58.0	46.6	55.0	45.9	63.0	42.9	60.0	25.0	34.0
31.25	10.7	10.5	51.9	60.0	49.9	57.0	41.1	49.0	39.1	46.0	40.1	51.0	37.1	48.0	23.6	36.0
62.50	15.5	15.1	47.4	58.0	45.4	55.0	31.9	43.0	29.9	40.0	34.1	44.0	31.1	41.0	21.5	32.0
100.00	19.9	19.0	44.3	52.0	42.3	49.0	24.4	33.0	22.4	30.0	30.0	35.0	27.0	32.0	20.1	32.0
250.00	33.0	31.0	38.3	48.0	36.3	45.0	5.3	17.0	3.3	14.0	22.0	19.0	19.0	16.0	17.3	30.0
300.00	-	36.0	-	43.0	-	40.0	-	13.0	-	10.0	-	14.0	-	11.0	-	28.0
400.00	-	41.6	-	40.0	-	37.0	-	8.0	-	5.0	-	8.0	-	5.0	-	26.0

Ordering Code

C06-FUTP-SLD-GY-DCA-500M

Category 6 F/UTP Cable, Solid 23 AWG, Grey, CPR: Dca, 500 Meters