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TECHNICAL DATA SHEET

Feb. 2016

UTP-FTP LAN NETWORK CABLES



CE / RoHS compliant

Indoor / Outdoor - Flame retardant - Suitable with power cables

CONSTRUCTION

Inner conductor

CAT5e: bare copper 1 x 24 AWG (0.51 mm)
CAT6: bare copper 1 x 23 AWG (0.57 mm)

Wire 0.51 mm (AWG 24) bare copper 4 x 2 x 24 AWG
Wire 0.57 mm (AWG 23) bare copper 4 x 2 x 23 AWG

Insulation HDPE

Thickness > 0.20 mm
UTP-FTP 24 AWG diameter Ø 0.91 mm (±0.02)
UTP-FTP 23 AWG diameter Ø 1.00 mm (±0.02)

Pair identification colours

Pair	A-wire	B-wire
1	White/Blue	Blue
2	White/Orange	Orange
3	White/Green	Green
4	White/Brown	Brown

Assembly

Paired conductors twisted together; CAT6 includes a separator.

Shielding (FTP only)

Overall aluminium/polyester foil; tinned copper drain wire Ø 0.40 mm.

Jacket

UTP-FTP CAT5e: grey PVC, CEI 36762 C-4 (Uo = 400 V)
UTP-FTP CAT6 LSZH: grey LSZH, CEI 36762 C-4 (Uo = 400 V)

Marking

UTP Cat5e: ELAN UTP 4x2x24AWG CAT5e PA - date - meter
FTP Cat5e: ELAN FTP 4x2x24AWG CAT5e PA - date - meter
UTP Cat6: ELAN UTP 4x2x23AWG CAT6 LSZH - CEI 36762 C-4 (Uo=400V) PA - date - meter
FTP Cat6: ELAN FTP 4x2x23AWG CAT6 LSZH - CEI 36762 C-4 (Uo=400V) PA - date - meter

ELECTRICAL CHARACTERISTICS

Frequency (MHz)	Atten. CAT5e	Atten. CAT6	NEXT CAT5e	NEXT CAT6	RL min (dB/100m)
1.00	1.9	1.9	73	75	20.0
10.00	6.1	5.9	57	65	25.0
16.00	7.7	7.5	53	63	25.0
31.25	10.8	10.4	50	54	23.6
62.50	15.7	14.8	45	50	21.5
100.00	19.9	19.3	40	53	20.1
150.00	25.6	24.7	38	47	18.8
200.00	29.2	28.4	37	43	18.0
250.00 CAT6	-	32.8	-	38	17.3
350.00 CAT6	-	39.8	-	34	16.3
450.00 CAT6	-	46.0	-	32	15.5
600.00 CAT6	-	54.5	-	30	14.7

Characteristic impedance (1-100 MHz)	100 ± 15 Ω
Max. resistance unbalance	CAT5e 2.5% / CAT6 2%
Max. capacitance unbalance	3.3 pF/m
Max. capacitance	56 pF/m
Velocity of propagation (100 MHz)	CAT5e 0.62 c / CAT6 0.68 c

MECHANICAL CHARACTERISTICS

Operating temperature range	-20°C to +60°C
Minimum bend radius	CAT5e 8 x Ø / CAT6 10 x Ø

Code	Description	Diameter [mm]	Weight [kg/km]	Packaging
09824(3)-(8)	UTP CAT5e 4x2x24AWG	5.00 ± 0.20	32.90	305 m box / 1000 m drum
09824(3)-(8)S	FTP CAT5e 4x2x24AWG	5.80 ± 0.20	38.50	305 m box / 1000 m drum
09823(3)-(8)	UTP CAT6 4x2x23AWG LSZH	6.00 ± 0.20	40.00	305 m box / 1000 m drum
09823(3)-(8)S	FTP CAT6 4x2x23AWG LSZH	6.80 ± 0.20	48.50	305 m box / 1000 m drum

The manufacturer reserves the right to modify the product without notice.