Cat5 Cable



Application

Horizontal patch cable.

Support current category 5 applications, such as: 10 Base-T, 100 Base-T, FDDI, ATM.

Standards

General standards: ISO/IEC 11801, EN 50173, TIA/EIA 568-A.

Construction and Dimensions

Construction : Shielded 4 twisted pairs.

Conductor : Stranded bare copper $(7 \times 0.16 \text{mm})$.

Conductor diameter : AWG 26 (0.48mm).

Conductor insulation material : Foam skin polyethylene (PE).

Diameter over insulation : 0.95 ± 0.05 mm.

 $\begin{array}{lll} \text{Drain wire} & : \text{Tinned copper, } 18 \times 0.10 \text{mm.} \\ \text{Shield} & : \text{Aluminium / polyester foil.} \\ \text{Jacket material} & : \text{PVC (Flame retardant).} \\ \end{array}$

Outer diameter : 5.2 ± 0.2 mm.



Pair 3

Pair 1

Pair 4

Pair 2

Colour code

Pair 1 Black-Blue/Blue.

Pair 2 Black-Orange/Orange.

Pair 3 Black-Green/Green.

Pair 4 Black-Brown/Brown.

Electrical characteristics (at 20°C)

Attenuation

Frequency	1	4	10	16	20	31.25	62.5	100	MHz
Specification (Maximum) ¹⁾	0.3	0.6	1	1.2	1.4	1.8	2.6	3.3	dB/10m

Next (Near end crosstalk)

Frequency	1	4	10	16	20	31.25	62.5	100	MHz
Specification (Maximum) ¹⁾	62	53	47	44	42	40	35	32	dB





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Electrical characteristics (at 20°C)

ACR

Frequency	1	4	10	16	20	31.25	62.5	100	MHz
Specification (Maximum) ¹⁾	62	52	46	43	41	38	32	29	dB/10m

^{1):} Specification values according to cable requirements of ISO/IEC 11801.

Electrical characteristics (at 20°C)

Nominal mutual capacitance at 1kHz : 50nF/km.

Maximum conductor DCR : 135Ohm/km.

NVP - Nominal Velocity of propagation : 0.75c.

SKEW -propagation delay difference (100MHz) : Typical ≥ 40ns/100m.

Impedance 1-100MHz : 100 ±15Ohm.

General and environmental characteristics

Temperature range - operation : -20° C to $+60^{\circ}$ C. Temperature range - installation : $+0^{\circ}$ C to $+50^{\circ}$ C.

Minimum bending radius - operation : 20mm. Minimum bending radius - installation : 40mm. Maximum pulling tension : 80N. Flame retardancy : IEC 332-1. Energy of flame : 300kJ/m. : 27kg/km. Weight (approximately) Maximum operating voltage : 48V rms. Maximum continuous current per conductor (25°C) : 1.0A.

Jacket Colour

Colour	RAL Code	Colour Code
Grey	RAL 7032	2620
Black	RAL 9005	2622
Blue	RAL 5010	2623
Red	RAL 3000	2625
Green	RAL 6016	2630
Yellow	RAL 1021	2632
Orange	RAL 2003	2633

Part Number Table

Description	Part Number				
Cable, CAT5 FTP, 100M	1868E 100M				

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