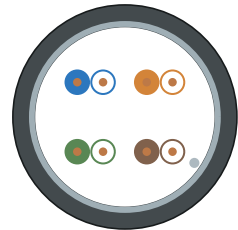


Cat5e F/UTP

4 pairs / 24 AWG / PVC / 100 MHz



Ø 5.3 mm approx.

SCHEMATIC / NOT TO SCALE

UPCOM series illustration. Jacket colour and conductor size follow the specification below.

5.30 mm

APPROX. OUTER DIAMETER

40 kg/km

APPROX. CABLE WEIGHT

17.5 kg/km

COPPER WEIGHT

A foil screen surrounds four unshielded twisted pairs in this 100 MHz fixed installation cable. The screen and drain wire provide a connection path for a screened structured cabling system.

CONSTRUCTION

Conductor	Solid annealed copper, 24 AWG
Insulation	Solid polyethylene (PE); EN 50290-2-23
Core assembly	4 twisted pairs
Pair identification	Colour coded to ANSI/TIA-568
Core wrapping	Polyester tape
Individual pair screen	None
Overall screen	Aluminium/polyester foil
Drain wire	Tinned copper
Outer jacket	Polyvinyl chloride (PVC); EN 50290-2-22
Jacket colour	RAL 7035 Grey; other colours on request

APPLICATION

10BASE-T, 100BASE-TX and 1000BASE-T. IEEE 802.3af / 802.3at (Types 1 and 2).

Link length, connecting hardware and PoE bundle temperature must be checked for the complete installation.

Cat5e F/UTP

4 pairs / 24 AWG / PVC

ELECTRICAL CHARACTERISTICS / 20°C

Conductor resistance at 20°C	< 95 Ω/km	Delay skew	< 45 ns/100 m
Resistance unbalance	< 1%	Operating voltage	72 V
Insulation resistance, 500 V DC / 1 min	> 5000 MΩ·km	Dielectric test, 1 min	1000 V
Mutual capacitance	50 pF/m	Transverse conversion loss (TCL)	Minimum level 2
Capacitance unbalance	1600 pF/km	Coupling attenuation	Type II
Characteristic impedance at 100 MHz	100 ± 5 Ω	Transfer impedance	Grade 2
Velocity of propagation	67%	Segregation class	c

SELECTED TRANSMISSION CHARACTERISTICS

Frequency MHz	Insertion loss dB / 100 m	NEXT dB	PS NEXT dB	Return loss dB
4	3.8	75	72	23
10	6	75	72	23
16	7.8	65	62	23
31.25	10.5	55	52	22
62.5	15.5	45	42	21
100	19	40	37	21

Cable reference values over the stated operating band. Channel performance depends on the installed link.

INSTALLATION AND JACKET

Operating temperature	-20°C to +60°C	PVC-jacketed version for routes specified with a conventional thermoplastic outer sheath. Check the project fire requirement before selecting a jacket.
Minimum bend radius	8 × D / approx. 42.4 mm	
D	Actual cable outer diameter	

Flame propagation reference: IEC/EN 60332-1-2.

Reference specifications: IEC 61156-5, ISO/IEC 11801, EN 50173-1, EN 50288-2-1, ANSI/TIA-568.2-D.

CPR classification and the corresponding Declaration of Performance must be confirmed for the ordered construction.