

CATEGORY 6 UTP CABLE FOR INDOOR USE

PSC-CAT6



Application

- Voice, data, security, and video applications. Analog/megapixel IP CCTV installations.
- Wired access points
- Indoor Fast Ethernet video/data installations.
- Long-distance PoE power supply.

Standards

- ANSI EIA/TIA 568 D
- ISO/IEC 11801 2nd Edition
- EN 50173
- IEEE 802.3at

Constructon

Conductor	Bare copper wire (24 AWG)
Insulaton	Polyethylene, $\varnothing 0.91\pm 0.02$ mm
Insulaton Color	Blue/White-Blue, Orange/white-Orange, Green/white-Green, Brown/white-Brown
TwistngCable	2 cores to the pair
lay upRip Cord	4 pairs to the core
Sheath	Yes
Diameter	PVC Blue RAL 5015
	5.60±0.2mm

Mechanical propertes

Minimum bending radius	Installaton	8 x D
	Installedduring operatonduring	4 x D
Temperature range	installatonUp To	-20°C ~ + 60°C
		0°C ~ + 50°C
Fluke Permanent Link	90 Meters	

Electrical properties @ 20°C

Conductor Resistance at 20°C	≤ 9.5 Ω / 100m
Resistance unbalance within a pair	≤ 5%
Dielectric Strength	
Test Voltage (cd/cd): 1.00KV DC or 0.7 KV AC for 1 min	No breakdown
Test Voltage (cd/screen): 1.00KV DC or 0.7 KV AC for 1 min	
Insulation Resistance at 20°C after 2min of electrification under a DC voltage between 100 & 500V	>1500 MΩ / 100m
Mutual capacitance	5600pF / 100m MAX
Capacitance unbalance pair to ground at 800Hz or 1 kHz	≤ 160 pF / 100m
Characteristic impedance at 100MHz	100 ± 15 Ω
Spark Test	2000 ± 250VOC

Nominal transmission characteristics @ 20°C

No.	Frequency MHz	Attenuation (Max) dB/100m	Propagation Delay (MAX) ns/100m	Propagation Delay Skew (MAX) ns/100m	Return Loss (Min) dB/100m	NEXT (Min) dB/ 100m	PS NEXT (Min) dB/100m	EL-FEXT (Min) dB/100m	PS EL-FEXT (Min) dB/100m
1	4	3.78	552.00	45	23.01	66.27	63.27	55.96	52.96
2	8	5.32	546.73	45	24.52	61.75	58.75	49.94	46.94
3	10	5.95	545.38	45	25.00	60.3	57.3	48	45.00
4	16	7.55	543.00	45	25.00	57.24	54.24	43.92	40.92
5	20	8.47	542.05	45	25.00	55.78	52.78	41.98	38.98
6	25	9.51	541.20	45	24.32	54.33	51.33	40.04	37.04
7	31.25	10.67	540.44	45	23.64	52.88	49.88	38.1	35.10
8	50	13.66	539.09	45	22.21	49.82	46.82	34.02	31.02
9	62.5	15.38	538.55	45	21.54	48.36	45.36	32.08	29.08
10	100	19.80	537.60	45	20.11	45.3	42.3	28	25.00
11	125	22.36	537.22	45	19.43	43.85	40.85	26.06	23.06
12	200	28.98	536.55	45	18.00	40.78	37.78	21.98	18.98
13	250	32.85	536.28	45	17.32	39.33	36.33	20.04	17.04

Remarks: * are the reference values.