



Description

24 AWG Stranded Twisted Pair, High-Performance Data Cable

Applicable Standards

- ETL Listed Type CMR
- C(ETL) listed CMG FT4
- ETL Verified to TIA - 568-C.2, UL 444, and ISO/IEC 11801
- ROHS Compliant
- ATM 155 Mbps
- Ethernet 10BASE-T, 100BASE-TX, 100BASE-VG, 100BASE-T4,
- 1000 Mbps 1000BASE-T Gigabit Ethernet™ (IEEE 802.3)
- 16 Mbps Token Ring™ (IEEE 802.5)

Physical Characteristics

Number of Conductor Pairs	4
Size	24 AWG
Stranding	Solid (7)
Conductor Material	Stranded Bare Copper
Shield Material	Unshielded
Rip Cord	Yes
Insulation Material	Polyethylene
Insulation Overall Diameter	0.0385 in. ± 0.001 in.
Insulation Average Thickness	0.0075 in.
Jacket	Flame Retardant PVC
Outer Jacket Average Wall Thickness	0.0236 in.
Outer Jacket Nom. O.D.	0.212 in.
Nominal Weight	23 lbs.

Mechanical Characteristics

Temperature Rating	Installation	0 to + 60°C
	Operating	-20°C to + 75°C
Min. Ben Radius		2.2 in.
Max. Pulling Force		25 lbs
Tensile Strength	Before	> = 13.8 Mpa
Elongation	Aging	> = 100%
Aging Condition		100°C x 168 hours
	After	> = 85% of unaged
	Aging	> = 50% of unaged

Color Code

Pair 1	White/Blue	Blue
Pair 2	White/Orange	Orange
Pair 3	White / Green	Green
Pair 4	White / Brown	Brown

Cable Marking

CATEGORY 5E 350MHZ STRANDED 24AWG 4 PR UTP XXXXXX
CMR C(ETL)US ETL LISTED & VERIFIED TO TIA - 568-C.2 *****FT

Electrical Performance

Frequency (MHz)	Attenuation (dB/100m)	Return loss (dB)	NEXT (dB)	PS-NEXT (dB)
	Max.	Min.	Min.	Min.
1	2.4	17.0	65.3	62.3
4	4.9	18.8	56.3	53.3
8	6.9	19.7	51.8	48.8
10	7.8	20.0	50.3	47.3
16	9.9	20.0	47.3	44.3
20	11.1	20.0	45.8	42.8
25	12.5	19.3	44.3	41.3
31.25	14.1	18.6	42.9	39.9
62.5	20.4	16.5	38.4	35.4
100	26.4	15.1	35.3	32.3

Frequency (MHz)	ELFEXT (dB/100m)	Delay (ns/100m)
	Min.	Max.
1	63.8	570.0
4	51.7	552.0
8	45.7	546.7
10	43.8	545.4
16	39.7	543.0
20	37.7	542.0
25	35.8	541.2
31.25	33.9	540.4
62.5	27.8	538.6
100	23.8	537.6

Electrical Characteristics

Maximum Conductor DC Resistance @ 20°C	9.38 Ω / 100 Meters
Maximum DC Resistance Unbalanced @ 20°C	5%
Maximum Pair-to-Pair Ground Capacitance Unbalance	330 pF / 100 Meters
Characteristic Impedance (1 ~ 350 MHz)	100 ± 15 Ω
Mutual Capacitance	5.6 nF / 100 Meters
Maximum Delay Skew	40 nS / 100 Meters

Part Numbers

Part Numbers	Color	Put-up
	Blue	1,000' Reel
	Grey	1,000' Reel
	White	1,000' Reel