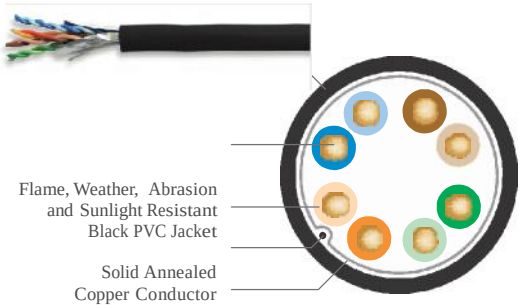
Category 5e ScTP (f/UTP)

CMR/CMX Outdoor Sunlight Resistant



Product Description

Grupo Matel Category 5e ScTP (F/UTP) CMR/CMX Outdoor Sunlight Resistant Cable is designed for extreme sunlight and temperature applications that require shielding and a ground wire for Power-over-Ethernet (PoE) devices. The specially formulated black jacket is designed to resist both temperatures down to -20°C (-4°F) and up to +65°C (+149°F). The level of UV protectants prevents damage from long-term UV sunlight exposure. The combination of temperature and UV tolerance makes this cable ideal for installations requiring cable to be exposed to direct sunlight for long periods of time, such as Wi-Fi applications. It is also suitable for retrofit cable applications requiring exterior runs with long term outdoor exposure between two environmentally protected points.

This cable has been tested and listed as UL 444 Sunlight Resistant compliant. This designation requires the cable to resist 720 hours of harsh UV and heat, and is more than twice the exposure time of the standard 300 hours required in the CMX Outdoor test. In addition, the CMR listing allows the cable to be used in riser spaces per UL 1666, eliminating the need to transition to more fire resistant cables.

The cable is sweep-tested to 350 MHz and meets all applicable ANSI/TIA-568-C.2 requirements. It supports 1000BASE-T and surpasses the Grade 2 requirements specified in the ANSI/TIA/EIA-570-B Residential Telecommunications Standard.

Specifications

Pair Count	4
Conductor	Solid annealed copper
AWG (mm)	24 (0.51)
Insulation	Polyolefin
Insulation Colors	Pair 1: ColorTip Light Blue, Blue Pair 2: ColorTip Light Orange, Orange Pair 3: ColorTip Light Green, Green Pair 4: ColorTip Light Brown, Brown
Shield	Aluminum foil tape
Drain Wire	24 AWG tinned copper
Jacket	Tough, flame retardant, sunlight, weather, and abrasion resistant, black, riser-rated PVC
Characteristic Impedance (Ohms)	100 ± 15
Nominal Velocity of Propagation (%)	67
Performance Compliance	UL 444 CSA C22.2 No. 214-08 UL 1581 UL 1666 NFPA 262 ANSI/TIA-568-C.2 Article 800, NEC (NFPA 70) RoHS-compliant
NRTL Programs	UL Verified CAT 5e UL, c(UL) Listed CMR UL, c(UL) Listed CMX Outdoor Sunlight Resistant

Applications

- 10BASE-T through 1000BASE-T Ethernet
- Power over Ethernet (PoE) – IEEE 802.3af
- PoE+ – IEEE 802.3at Type 1 and 2
- Wi-Fi – IEEE 802.11a/b/g/n
- Applications requiring secure networks or protection from EMI/RFI
- Indoor/Outdoor Ethernet applications

Features	Benefits
• UL 444/UL 1581 Sunlight Resistant Listed	• Increased life in direct, long term sunlight
• Combined CMR Riser Indoor and CMX Outdoor Sunlight Resistant Listing	• Reduces inventory by eliminating multiple cable types
• Meets ANSI/TIA-568-C.2 specification	• CAT 5e compliant
• CableID® alpha numeric code printed every 2 feet	• Allows both ends of a cable run to be easily identifiable without the need to separately label or tone the cable
• QuickCount® marking system in feet and meters	• Provides remaining length of cable on reel
• ColorTip™ Circuit Identification System	• Easily identifiable conductor mates even in low-light environments
• RoHS-compliant	• Free of heavy metal and toxic components

Part Numbers and Physical Characteristics

Part Number[1]	Nominal Diameter in (mm)	Approx. Weight lbs/kft (kg/km)	Package	Packages per Pallet
15F-220-E11	0.28 (7.1)	31 (46)	1,000' Plywood reel	12

Electrical Specifications

Frequency MHz	Insertion Loss @20°C Maximum dB/100 m		NEXT Minimum dB/100 m		ACR Minimum dB/100 m		PSNEXT Minimum dB/100 m	
	TIA-568-C.2	Grupo matel	TIA-568-C.2	Grupo matel	TIA-568-C.2	Grupo matel	TIA-568-C.2	Grupo matel
	Specified	Typical	Specified	Typical	Calculated	Typical	Specified	Typical
1	2.0	1.8	65.3	79.4	63.3	77.7	62.3	77.2
4	4.1	3.6	56.3	69.9	52.2	66.4	53.3	67.4
8	5.8	5.1	51.8	65.1	46.0	60.0	48.8	62.7
10	6.5	5.8	50.3	63.6	43.8	57.9	47.3	61.2
16	8.2	7.4	47.3	60.4	39.1	53.1	44.3	58.0
20	9.3	8.2	45.8	59.0	36.5	50.9	42.8	56.6
25	10.4	9.3	44.3	57.5	33.9	48.3	41.3	55.1
31.25	11.7	10.5	42.9	56.0	31.2	45.7	39.9	53.5
62.5	17.0	14.9	38.4	51.7	21.4	36.8	35.4	49.2
100	22.0	19.2	35.3	48.5	13.3	29.5	32.3	46.0

Frequency MHz	PSACR Minimum dB/100 m		Return Loss Minimum dB/100 m		ELFEXT Minimum dB/100 m		PSELFEXT Minimum dB/100 m	
	TIA-568-C.2	Grupo matel	TIA-568-C.2	Grupo matel	TIA-568-C.2	Grupo matel	TIA-568-C.2	Grupo matel
	Calculated	Typical	Specified	Typical	Specified	Typical	Specified	Typical
1	60.3	75.4	20.0	28.5	63.8	72.6	60.8	70.6
4	49.2	64.0	23.0	35.6	51.7	60.7	48.7	59.0
8	43.0	57.7	24.5	35.7	45.7	54.8	42.7	53.1
10	40.8	55.6	25.0	35.9	43.8	52.9	40.8	51.1
16	36.1	50.8	25.0	35.2	39.7	48.9	36.7	47.1
20	33.5	48.6	25.0	34.9	37.7	47.0	34.7	45.2
25	30.9	46.0	24.3	35.2	35.8	45.1	32.8	43.3
31.25	28.2	43.4	23.6	34.8	33.9	43.2	30.9	41.3
62.5	18.4	34.6	21.5	31.8	27.8	37.2	24.8	35.2
100	10.3	27.3	20.1	30.1	23.8	33.2	20.8	31.1