



PRODUCT DESCRIPTION

Category 5e Plenum (CMP) ideal for voice, video and security communications medium for your network installation. Manufactured to the highest standards and approved by organizations such as UL and ETL and when compared to TIA guidelines it meets or surpasses in all categories. It has 24-gauge solid bare copper conductors organized into four color coded twisted pairs which are insulated with high density polyethylene insulation. Overall foiled cable encases the signal-carrying wires in a conducting shield as a means of reducing the potential for electromagnetic interference (EMI) With a CMP rated jacket for Plenum rated spaces and Cat 5e CMP cable is easy to use during installations and pulls smoothly with no kinks.

APPLICATIONS

- Structured cabling for horizontal and building backbone cable.
- Transmission of digital and analogue for data, video and audio applications.
- Overall metal shielded providing good protection from EMI noise.
- IEEE 802.3u 100BASE-T and legacy speeds.
- CDDI / ATM / Token Ring
- IEEE 802.3af (PoE) / IEEE 802.3at (PoE+)

PHYSICAL & ELECTRICAL CHARACTERISTICS

At 20 °C	
Temperature & voltage rating	75°C / 300V
Spark test	2.5 KV DC
AC leakage current through overall jacket	≤ 10mA (1.5KV AC)
Cable cold bend	-20°C for 4 hr
Conductor DC resistance	≤ 9.38 Ω/100m
Resistance unbalance	≤ 5%
Dielectric strength	1.5 KV ac for 2 s
Insulation resistance	≥ 5000 MΩ•Km
Mutual capacitance	≤ 5.6 nF/100m
Capacitance unbalance pair-to-ground	≤ 330 pF/100m

USAGE & ENVIRONMENTAL CONDITION

Temperature range	Storage & shipping	-20°C to 75°C
	Installation	0°C to 60°C
	Operation	-20°C to 60°C
Minimum bending radius	≥ 4 times of overall diameter	
Maximum pulling tension	≤ 110 N	

PERFORMANCE COMPLIANCE

- ANSI/TIA-568-C.2 (2009)
- ISO/IEC 11801 (Edition 2.2), IEC 61156-5 (Edition 2.0)
- Flame Test - NFPA 262 (CMP)
- UL 444, 22.2 NO.214
- EU Directive 2011/65/EC (RoHS2)
- EU Directive 2006/95/EC (LVD)
- CE compliance date: 2010.01.01

FEATURES

- Award winning trademarked packaging
- High performance of transmission
- High quality of safety property
- Sweep frequency up to 350 MHz (Enhanced)
- verified to 100 MHz
- Meets/exceeds ANSI/TIA-568-C.2 specification
- Meets ISO/IEC 11801 (Edition 2.2)
- Meets IEC 61156-5 (Edition 2.0)
- WideMouth and Reelex carton
- Quick Count marking system in feet

Available in nine different jacket colors



ELECTRICAL PERFORMANCE COMPARISON (At 20 °C)

Frequency (MHz)	INSERTION LOSS		NEXT		PS.NEXT		ACR	
	TIA-568-C.2	Hyperline	TIA-568-C.2	Hyperline	TIA-568-C.2	Hyperline	TIA-568-C.2	Hyperline
	Max. dB/100m	Max. dB/100m	Max. dB/100m	Max. dB/100m	Max. dB/100m	Max. dB/100m	Max. dB/100m	Max. dB/100m
1	2.0	2.0	65.3	65.3	62.3	62.3	63.3	63.2
4	4.1	4.0	56.3	56.2	53.3	53.2	52.2	52.2
10	6.5	6.4	50.3	50.3	47.3	47.3	43.8	43.8
16	8.2	8.2	47.2	47.2	44.2	44.2	39.0	38.9
20	9.3	9.2	45.8	45.7	42.8	42.7	36.5	36.5
25	10.4	10.4	44.3	44.3	41.3	41.3	33.9	33.9
31.25	11.7	11.7	42.9	42.8	39.9	39.8	31.2	31.1
62.5	17.0	16.9	38.4	38.3	35.4	35.3	21.4	21.3
100	22.0	21.9	35.3	35.3	32.3	32.3	13.3	13.3
200		32.4		30.7		27.7		N.A.
250		36.8		29.3		26.3		N.A.
300		40.9		28.1		25.1		N.A.
350		44.8		27.1		24.1		N.A.

Frequency (MHz)	PS.ACR		ACRF		PS.ACRF		RETURN LOSS	
	TIA-568-C.2	Hyperline	TIA-568-C.2	Hyperline	TIA-568-C.2	Hyperline	TIA-568-C.2	Hyperline
	Max. dB/100m	Max. dB/100m	Max. dB/100m	Max. dB/100m	Max. dB/100m	Max. dB/100m	Max. dB/100m	Max. dB/100m
1	60.3	60.2	63.8	63.8	60.8	60.8	20.0	20.0
4	49.2	49.2	51.8	51.7	48.8	48.7	23.0	23.0
10	40.8	40.8	43.8	43.8	40.8	40.8	25.0	25.0
16	36.0	35.9	39.7	39.7	36.7	36.7	25.0	25.0
20	33.5	33.5	37.8	37.7	34.8	34.7	25.0	25.0
25	30.9	30.9	35.8	35.8	32.8	32.8	24.3	24.3
31.25	28.2	28.1	33.9	33.9	30.9	30.9	23.6	23.6
62.5	18.4	18.3	27.9	27.8	24.9	24.8	21.5	21.5
100	10.3	10.3	23.8	23.8	20.8	20.8	20.1	20.1
250		N.A.		15.8		12.8		17.3
300		N.A.		14.2		11.2		16.7
350		N.A.		12.9		9.9		16.3

Values above 100MHz are for information only.



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ELECTRICAL SPECIFICATIONS (At 20 °C)

Frequency (MHz)	Propagation Delay	
	TIA-568-C.2	Hyperline
	Max. dB/100m	Max. dB/100m
1	570	570
4	552	552
8	547	546
10	545	545
16	543	543
20	542	542
25	541	541
31.25	540	540
62.5	539	538
100	538	537
150		536
200		536
250		536
300		536
350		535

Values above 100MHz are for information only.

MATERIALS & CONSTRUCTION

Conductor	Material	24AWG solid bare copper	
Insulation	Material of dual layer	Polyolefin (PO)	
	Color code & diameter	Blue & white/blue Stripe	1.06 ± 0.02 mm
		Orange & white/orange stripe	1.04 ± 0.02 mm
		Green & white/green stripe	1.06 ± 0.02 mm
		Brown & white/brown stripe	1.04 ± 0.02 mm
Material of single layer	Fluorinated Ethylene Propylene (FEP)		
Twisted	Description	Left hand direction	
Assembly	Description	Left hand direction	
Jacket	Material	Flame retardant polyvinyl chloride (FRPVC)	
	Diameter	6.1 ± 0.2 mm	
	Thickness	0.50 ± 0.05 mm	
	Color	Per Hyperline standard	
Drain wire	Material	24AWG solid tinned copper	



MATERIALS & CONSTRUCTION

Rip cord	Material	Polyester multi-yarn
Shield	Material	Al Mylar tape, 100 % coverage and mylar side facing out
Nominal Velocity of Propagation	(NVP) 72%	
NRTL Program	c(UL)us listed CMP ETL Verified / CSA certified	
Marking	Hyperline FUTP4-C5E-SOLID-CMP-305---E303448 F/UTP 4PR 24AWG C(UL)US CMP---ETL VERIFIED TO ANSI/TIA-568-C.2 CAT 5E 350MHz www/yy XXXXFT-A Note 1: mmyy is date code.	

ORDERING

Part Number	Product Description
FUTP4-C5E-SOLID-CMP-WH-305	Category 5e Plenum, FTP, 24 AWG, White 305 Meter/1000 FT Pull Box
FUTP4-C5E-SOLID-CMP-BL-305	Category 5e Plenum, FTP, 24 AWG, Blue 305 Meter/1000 FT Pull Box
FUTP4-C5E-SOLID-CMP-GY-305	Category 5e Plenum, FTP, 24 AWG, Grey 305 Meter/1000 FT Pull Box
FUTP4-C5E-SOLID-CMP-OR-305	Category 5e Plenum, FTP, 24 AWG, Orange 305 Meter/1000 FT Pull Box
FUTP4-C5E-SOLID-CMP-GN-305	Category 5e Plenum, FTP, 24 AWG, Green 305 Meter/1000 FT Pull Box
FUTP4-C5E-SOLID-CMP-VT-305	Category 5e Plenum, FTP, 24 AWG, Violet 305 Meter/1000 FT Pull Box
FUTP4-C5E-SOLID-CMP-BK-305	Category 5e Plenum, FTP, 24 AWG, Black 305 Meter/1000 FT Pull Box
FUTP4-C5E-SOLID-CMP-YL-305	Category 5e Plenum, FTP, 24 AWG, Yellow 305 Meter/1000 FT Pull Box
FUTP4-C5E-SOLID-CMP-RD-305	Category 5e Plenum, FTP, 24 AWG, Red 305 Meter/1000 FT Pull Box
FUTP4-C5E-SOLID-CMP-PK-305	Category 5e Plenum, FTP, 24 AWG, Pink 305 Meter/1000 FT Pull Box



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