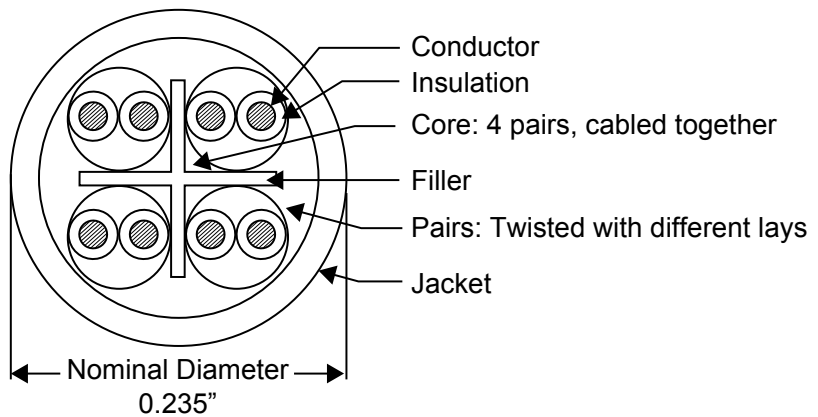


# 630 Series CMR Cat 6 UTP Cable

TE630R



## Description

TE Connectivity's 630 Series cable is TE's highest performing Category 6 cable, featuring a star filler to provide additional headroom on key parameters. 630 Series Category 6 cables exceed ANSI/TIA-568-C Category 6 and ISO/IEC 11801 Class E performance requirements by significant margins on all parameters. The TE Category 6 System complies with all of the performance requirements for current and proposed applications such as Gigabit Ethernet (1000BASE-Tx), 10/100BASE-Tx, token ring, 155 Mbps ATM, 100 Mbps TP-PMD, ISDN, analog and digital video and analog and digital voice (VoIP).

630 Series Category 6 UTP cables are available in standard colors including white, gray, blue and yellow. Category 6 Cables from TE feature lead-free jacketing. Packaging is on reels or reel-in-a-box, with standard put-ups being 1000 ft splice-free lengths.

## Specification

Horizontal cabling shall be 24 AWG, 4-pair UTP, NEC/NFPA CMR rated and be independently verified for compliance. Cable jacketing shall be white, gray, blue or yellow and shall be lead-free. Cable shall exceed all ANSI/TIA and ISO Category 6 /Class E requirements as well as meet the performance requirements listed in the table shown on page 2.

Cable performance shall be independently verified and characterized to 600 MHz. Cable shall be supplied on reels or reel-in-a-box. Independent verification for flammability compliance shall be to NEC article 800 and NFPA 70; CMR ANSI/UL 1666. Horizontal cable shall be TE part number TE630R-XXYY.

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## PERFORMANCE DATA

FREQ MHZ	FITTED IMPEDANCE Ohms	INSERTION LOSS dB/100 m		RETURN LOSS dB/100 m		PAIR-PAIR NEXT dB/100 m		PSNEXT dB/100 m	
	Spec	Max	Spec	Min	Spec	Min	Spec	Min	Spec
1	100+/-5	1.8	2.0	26.2	20.0	85.1	74.3	88.6	72.3
4	100+/-3	3.6	3.8	30.8	22.9	76.9	65.3	77.3	63.3
8	100+/-3	5.1	5.3	33.3	24.5	75.9	60.8	80.5	58.8
10	100+/-3	5.8	6.0	34.0	25.0	75.4	59.3	76.6	57.3
16	100+/-3	7.4	7.6	37.1	25.0	71.3	56.2	74.4	54.2
20	100+/-3	8.2	8.5	37.0	25.0	73.4	54.8	66.9	52.8
25	100+/-3	9.3	9.5	37.4	24.3	68.7	53.3	68.2	51.3
31.25	100+/-3	10.4	10.7	37.8	23.6	69.6	51.9	71.1	49.9
62.5	100+/-3	14.9	15.4	33.9	21.5	66.0	47.4	62.6	45.4
100	100+/-3	19.1	19.8	30.3	20.1	60.0	44.3	60.2	42.3
155	100+/-3	24.1	25.2	27.2	18.8	57.7	41.4	56.2	39.4
200	100+/-3	27.6	29.0	27.6	18.0	56.9	39.8	57.4	37.8
250	100+/-3	31.0	32.8	25.1	17.3	52.8	38.3	50.5	36.3
300	100+/-3	34.3	-	24.3	-	52.6	-	52.1	-
350	100+/-3	37.2	-	22.3	-	53.0	-	51.0	-
400	100+/-3	39.9	-	21.5	-	49.9	-	48.7	-
400	100+/-3	42.7	-	19.9	-	46.4	-	47.0	-
450	100+/-3	45.3	-	18.7	-	39.0	-	42.6	-
550	100+/-3	47.4	-	15.5	-	40.5	-	35.3	-
600	100+/-3	47.5	-	13.4	-	38.3	-	30.6	-

## PERFORMANCE DATA

FREQ MHZ	PAIR-PAIR ACR dB/100 m		PSACR dB/100 m		PAIR-PAIR ACRF dB/100 m		PSACRF dB/100 m		TCL dB/100 m	ELTCTL dB/100 m
	Min	Spec	Min	Spec	Min	Spec	Min	Spec	Min	Min
1	83.5	72.3	82.9	70.3	72.8	67.8	72.7	64.8	40.0	35.0
4	73.4	61.5	73.0	59.5	61.4	55.8	61.4	52.8	40.0	23.0
8	71.1	55.4	70.0	53.4	55.8	49.7	55.7	46.7	40.0	16.9
10	70.0	53.3	68.1	51.3	53.8	47.8	53.6	44.8	40.0	15.0
16	64.2	48.7	60.0	46.7	53.7	43.7	49.7	40.7	38.0	10.9
20	65.5	46.3	62.2	44.3	49.8	41.8	47.7	38.8	37.0	9.0
25	59.5	43.8	62.3	41.8	47.8	39.8	45.9	36.8	36.0	7.0
31.25	59.7	41.2	57.8	39.2	45.8	37.9	44.1	34.9	35.1	5.1
62.5	52.2	32.0	59.0	30.0	44.0	31.9	37.8	28.9	32.0	-
100	41.0	24.5	49.7	22.5	38.0	27.8	34.0	24.8	30.0	-
155	34.7	16.3	39.1	14.3	34.2	24.0	30.6	21.0	28.1	-
200	30.4	10.8	33.5	8.8	28.8	21.8	28.8	18.8	27.0	-
250	23.0	5.5	29.2	3.5	27.6	19.8	27.3	16.8	26.0	-
300	19.6	-	18.4	-	26.5	-	26.4	-	-	-
350	17.3	-	15.9	-	25.7	-	25.8	-	-	-
400	13.4	-	12.2	-	25.1	-	25.3	-	-	-
400	6.4	-	6.0	-	25.0	-	24.4	-	-	-
400	-3.9	-	-4.0	-	25.4	-	24.8	-	-	-
550	-4.2	-	-4.7	-	23.3	-	22.4	-	-	-
600	-5.6	-	-5.1	-	20.8	-	19.6	-	-	-

NOTE: The above listed discrete frequency electrical performance values are provided for engineering information only. Actual compliance testing is based on swept frequency measurements.

# 630 Series CMR Cat 6 UTP Cable

TE630R

## SPECIFICATIONS

<b>Mutual Capacitance:</b>	5.6 nF/100 m maximum
<b>Conductor DC Resistance:</b>	28.6 $\Omega$ /1000 ft (9.38 $\Omega$ /100 m) maximum
<b>Voltage:</b>	300 VDC
<b>Delay Skew:</b>	25 ns/100 m
<b>Propagation Delay:</b>	485 ns/100 m @ 250 MHz
<b>Nominal Velocity of Propagation:</b>	69%
<b>Operating Temperature:</b>	-20° C - 60° C (-4° F - 140° F)
<b>Storage Temperature:</b>	-20° C - 80° C (-4° F - 176° F)
<b>Installation Temperature:</b>	5° C - 50° C (41° F - 122° F)
<b>Bend Radius:</b>	4 × cable diameter
<b>Packaging:</b> 1000' Reel-in-a-box:	31 lbs/kft
1000' Reel:	28 lbs/kft
<b>Materials:</b> Conductors:	24 AWG, Solid Copper (0.0216" nominal)
Insulation:	Ø.038 nominal, polyethylene
Jacket:	Ø.235 nominal, FR PVC
<b>Compliances:</b>	UL Subject 444 (UL)-C(UL) Type CMR ICEA S-90-661 ETL Verified TIA-568-C.2 Category 6 Horizontal Cable Requirements ISO/IEC 11801 Category 6 Horizontal Cable Requirements 2002/95/EC RoHS



## ORDERING INFORMATION

Product Description	Packaging	Part Numbers
Category 6 UTP Cable, 4-Pair, Riser (CMR) Rated	1000' Reel-in-Box	TE630R-XXRB
	1000' Reel	TE630R-XX02

\*Additional reel sizes available, please contact TE customer service.

The following jacket colors are available. Replace XX with:

BL= Blue	WT=White	GY=Gray	YL=Yellow	GN=Green
BK=Black	RD=Red	OR=Orange	VT=Violet	BN=Brown

## DATA SHEET



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