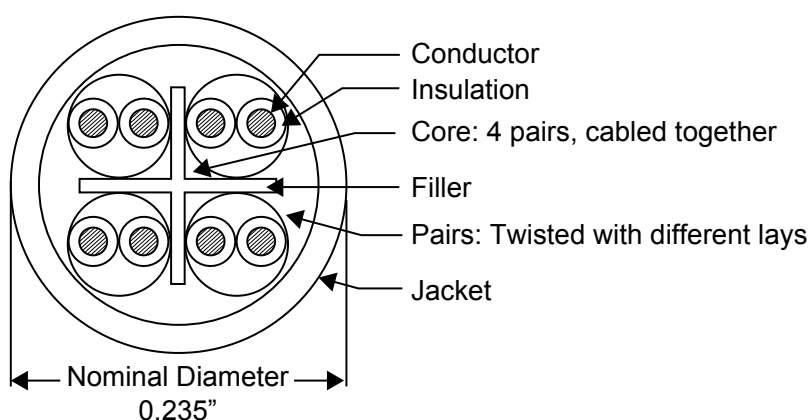


# 630 Series CMR Cat 6 UTP Cable Cut Sheet

## 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.

### ORDERING INFORMATION

Product Description	Packaging	Part Numbers			
		Blue	White	Gray	Yellow
Category 6 UTP Cable, 4-Pair, Riser (CMR) Rated	1000ft Reel-in-Box	TE630R-BLRB	TE630R-WTRB	TE630R-GYRB	TE630R-YLRB
	1000 ft Reel	TE630R-BL02	TE630R-WT02	TE630R-GY02	TE630R-YL02

# 630 Series CMR Cat 6 UTP Cable Cut Sheet

TE630R

## PERFORMANCE DATA

FREQ MHZ	FITTED IMPEDANCE Ohms	INSERTION LOSS dB/100m		RETURN LOSS dB/100m		PAIR-PAIR NEXT dB/100m		PSNEXT dB/100m	
	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/100m		PSACR dB/100m		PAIR-PAIR ACRF dB/100m		PSACRF dB/100m		TCL dB/100m	ELTCTL dB/100m
	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 Cut Sheet

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> 1000ft Reel-in-a-box:	31 lbs/kft
1000ft 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



## DATA SHEET

**Contact us:**  
Greensboro, NC  
USA 27409-8420  
Tel: 1-800-553-0938  
Fax: 1-717-986-7406

[www.te.com/EnterpriseNetworks](http://www.te.com/EnterpriseNetworks)



TE Connectivity, TE connectivity (logo), Tyco Electronics, TE (logo) are trademarks of the TE Connectivity Ltd. family of companies and its licensors.

While TE Connectivity has made every reasonable effort to ensure the accuracy of the information in this document, TE Connectivity does not guarantee that it is error-free, nor does TE Connectivity make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE Connectivity reserves the right to make any adjustments to the information contained herein at any time without notice. TE Connectivity expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this document are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE Connectivity for the latest dimensions and design specifications.

Tyco Electronics Corporation, a TE Connectivity Ltd. Company. All Rights Reserved.

311470AE 4/12 Revision © 2012, 2011