

CS34R ETL Verified Category 6 U/UTP Cable, non-plenum, orange jacket, 4 pair count, 3000 ft (914 m) length, reel

#### **Product Classification**

Regional Availability

Asia | Australia/New Zealand | EMEA | Latin America

Portfolio NETCONNECT®

Product Type Twisted pair cable

General Specifications

**Product Number** CS34R

ANSI/TIA Category 6

Cable Component Type Horizontal

 Cable Type
 U/UTP (unshielded)

Conductor Type, singles Solid
Conductors, quantity 8

Jacket Color Orange

Note All electrical transmission tests include swept frequency measurements

Pairs, quantity 4

Separator Type Tape separator

Transmission Standards ANSI/TIA-568.2-D | CENELEC EN 50288-6-1 | ISO/IEC 11801 Class E

Dimensions

**Cable Length** 914.4 m | 3000 ft

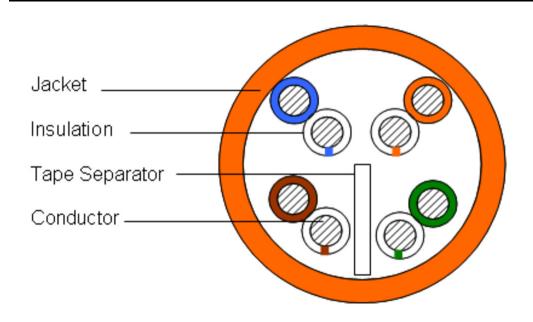
Cable Length Tolerance ±5%

Diameter Over Insulated Conductor1.054 mm | 0.041 inDiameter Over Jacket, nominal5.588 mm | 0.22 inJacket Thickness0.508 mm | 0.02 in

Conductor Gauge, singles 23 AWG

Cross Section Drawing





### **Electrical Specifications**

Characteristic Impedance 100 ohm

dc Resistance Unbalance, maximum  $5\,\%$ 

dc Resistance, maximum 8 ohms/100 m | 2.438 ohms/100 ft

**Delay Skew, maximum** 30 ns

Dielectric Strength, minimum1500 Vac | 2500 VdcMutual Capacitance at Frequency5.6 nF/100 m @ 1 kHz

Nominal Velocity of Propagation (NVP) 69 %

Operating Frequency, maximum250 MHzOperating Voltage, maximum80 V

**Remote Powering** Fully complies with the recommendations set forth by IEEE 802.3bt (Type 4) for the

safe delivery of power over LAN cable when installed according to ISO/IEC 14763-2,

CENELEC EN 50174-1, CENELEC EN 50174-2 or TIA TSB-184-A

Safety Voltage Rating 300 V



#### Flectrical Cable Performance

**CS** CommScope

STD Refers to the standard value listed under Transmission Standards in the Electrical Specifications above

TYP Typical Electrical Performance

IL Insertion Loss (dB/100m) NEXT Near End Crosstalk (dB/100m)

 ACR
 Attenuation to Crosstalk Ratio (dB/100m)
 PSNEXT
 Power Sum Near End Crosstalk (db/100m)

 PSACR
 Power Sum Attenuation to Crosstalk Ratio (dB/100m)
 ACRF
 Attenuation to Crosstalk Ratio - Far End (dB/100m)

PSACRF Power Sum Attenuation to Crosstalk Ratio - Far End (dB/100m) RL Return Loss (dB)

TCL Transverse Conversion Loss (dB/100m) ELTCTL Equal Level Transverse Conversion Transfer Loss (dB/100m)

Freq. MHz	IL			NEXT			ACR			PSNEXT			PSACR			ACRF			PSACRF			RL		
	cs	STD	TYP	cs	STD	TYP	cs	STD	ТҮР	cs	STD	TYP	cs	STD	TYP	cs	STD	ТҮР	cs	STD	TYP	CS	STD	TYP
1	2	2	1.8	75.3	74.3	89.3	73.3	72.3	87.6	72.3	72.3	87	70.3	70.3	85.3	68	67.8	84.3	65	64.8	82.4	20	20	34
4	3.8	3.8	3.5	66.3	65.3	80	62.5	61.5	76.5	63.3	63.3	77.7	59.5	59.5	74.1	56	55.8	72.6	53	52.8	70.8	23	23	33.9
8	5.3	5.3	5	61.8	60.8	75.5	56.4	55.4	70.5	58.8	58.8	73.2	53.4	53.4	68.2	49.8	49.7	66.8	46.9	46.7	64.9	24.5	24.5	35.5
10	6	6	5.6	60.3	59.3	73.9	54.3	53.3	68.3	57.3	57.3	71.5	51.3	51.3	65.9	48	47.8	64.9	45	44.8	63	25	25	36.5
16	7.6	7.6	7.2	57.2	56.2	70.6	49.7	48.7	63.4	54.2	54.2	68.3	46.7	46.7	61.1	43.9	43.7	60.8	40.9	40.7	58.9	25	25	37.6
20	8.5	8.5	8.1	55.8	54.8	69.2	47.3	46.3	61.2	52.8	52.8	66.9	44.3	44.3	58.8	42	41.8	58.9	39	38.8	56.9	25	25	38.2
25	9.5	9.5	9	54.3	53.3	67.6	44.8	43.8	58.6	51.3	51.3	65.3	41.8	41.8	56.2	40	39.8	57	37	36.8	55	24.3	24.3	38.2
31.25	10.7	10.7	10.1	52.9	51.9	66.3	42.2	41.2	56.1	49.9	49.9	63.9	39.2	39.2	53.8	38.1	37.9	55	35.1	34.9	53	23.6	23.6	38.3
62.5	15.4	15.4	14.5	48.4	47.4	61.4	33	32	46.9	45.4	45.4	59	30	30	44.5	32.1	31.9	48.9	29.1	28.9	46.9	21.5	21.5	34.7
100	19.8	19.8	18.6	45.3	44.3	58.1	25.5	24.5	39.5	42.3	42.3	55.7	22.5	22.5	37.1	28	27.8	44.7	25	24.8	42.8	20.1	20.1	31.6
155	25.2	25.2	23.5	42.4	41.4	55.7	17.3	16.3	32.2	39.4	39.4	53	14.3	14.3	29.5	24.2	24	41	21.2	21	39	18.8	18.8	29.6
200	29	29	26.9	40.8	39.8	52.6	11.8	10.8	25.7	37.8	37.8	50.4	8.8	8.8	23.4	22	21.8	38.6	19	18.8	36.7	18	18	29.3
250	32.8	32.8	30.3	39.3	38.3	50.8	6.5	5.5	20.5	36.3	36.3	48.6	3.5	3.5	18.3	20	19.8	36.5	17	16.8	34.7	17.3	17.3	28.8
300			33.5			49			15.6			46.8			13.4			34.5			32.6			28.9
350			36.4			47.6			11.2			45.4			9			33			31			29
400			39			46.3			7.3			44.1			5.1			31.3			29.3			30.3
500			44.3			43.2			-1.1			41.2			-3.1			27.3			25.5			31
550			44.6			43.1			-0.5			41.2			-2.5			27.4			25.5			31
650			51.3			40.2			-11.1			38.4			-12.9			22.3			20.4			25

### Material Specifications

 Conductor Material
 Bare copper

 Insulation Material
 Polyolefin

 Jacket Material
 PVC

Jacket Material PVC

Separator Material Polyolefin

Mechanical Specifications

**Pulling Tension, maximum** 11.34 kg | 25 lb

**Environmental Specifications** 

**COMMSCOPE®** 

Installation temperature  $0 \, ^{\circ}\text{C} \text{ to } +60 \, ^{\circ}\text{C} \text{ (+32 } ^{\circ}\text{F to } +140 \, ^{\circ}\text{F)}$ 

**Operating Temperature**  $-20 \,^{\circ}\text{C} \text{ to } +60 \,^{\circ}\text{C} \, (-4 \,^{\circ}\text{F to } +140 \,^{\circ}\text{F})$ 

Environmental Space Non-plenum

Flame Test Method CMR | NEC Article 800 | UL 1666 | UL 444

Packaging and Weights

**Cable weight** 35.091 kg/km | 23.58 lb/kft

Packaging Type Reel

Regulatory Compliance/Certifications

Agency Classification

ISO 9001:2015 Designed, manufactured and/or distributed under this quality management system

