

CS54ZB Category 7 F/FTP Cable, low smoke zero halogen, orange jacket, 4 pair count, 1640 ft (500 m) length, reel

## Product Classification

<b>Regional Availability</b>	EMEA
<b>Portfolio</b>	NETCONNECT®
<b>Product Type</b>	Twisted pair cable

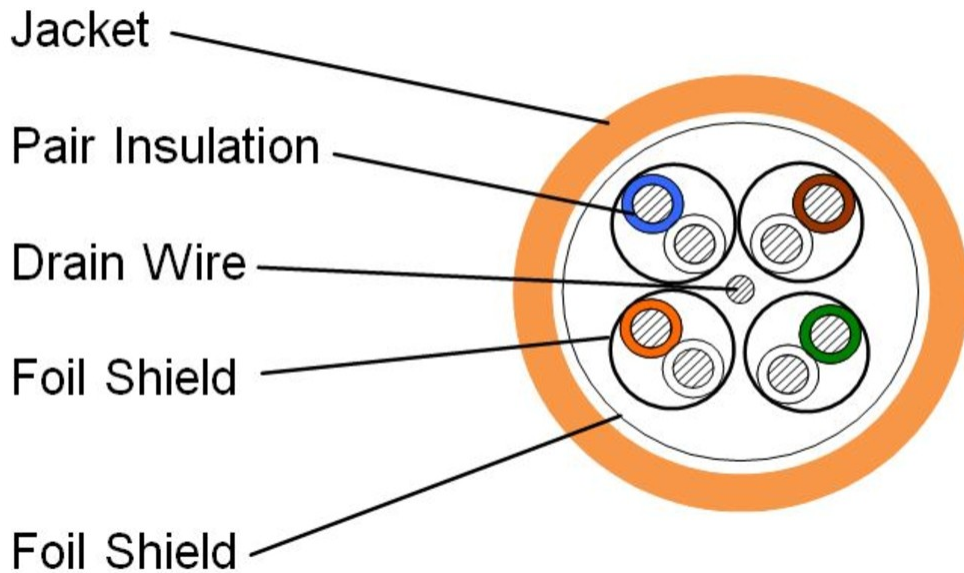
## General Specifications

<b>Product Number</b>	CS54ZB
<b>ANSI/TIA Category</b>	7
<b>Cable Component Type</b>	Horizontal
<b>Cable Type</b>	F/FTP (shielded)
<b>Conductor Type, singles</b>	Solid
<b>Conductors, quantity</b>	8
<b>Jacket Color</b>	Orange
<b>Note</b>	All electrical transmission tests include swept frequency measurements
<b>Pairs, quantity</b>	4
<b>Transmission Standards</b>	CENELEC EN 50288-4-1   IEC 61156-5 Cat 7   ISO/IEC 11801 Class F

## Dimensions

<b>Cable Length</b>	500 m   1,640.42 ft
<b>Cable Length Tolerance</b>	±5%
<b>Diameter Over Jacket, nominal</b>	7.399 mm   0.291 in
<b>Jacket Thickness</b>	0.635 mm   0.025 in
<b>Conductor Gauge, singles</b>	23 AWG

## Cross Section Drawing



### Electrical Specifications

<b>Coupling Attenuation</b>	Type Ib
<b>dc Resistance Unbalance, maximum</b>	2 %
<b>dc Resistance, maximum</b>	7.61 ohms/100 m   2.32 ohms/100 ft
<b>Mutual Capacitance at Frequency</b>	4.2 nF/100 m @ 1 kHz
<b>Nominal Velocity of Propagation (NVP)</b>	80 %
<b>Operating Frequency, maximum</b>	600 MHz
<b>Operating Voltage, maximum</b>	80 V
<b>Segregation Class</b>	d
<b>Transfer Impedance</b>	Grade 2

## Electrical Cable Performance

<b>CS</b>	CommScope		
<b>STD</b>	Refers to the standard value listed under Transmission Standards in the Electrical Specifications above		
<b>TYP</b>	Typical Electrical Performance		
<b>IL</b>	Insertion Loss (dB/100m)	<b>NEXT</b>	Near End Crosstalk (dB/100m)
<b>ACR</b>	Attenuation to Crosstalk Ratio (dB/100m)	<b>PSNEXT</b>	Power Sum Near End Crosstalk (db/100m)
<b>PSACR</b>	Power Sum Attenuation to Crosstalk Ratio (dB/100m)	<b>ACRF</b>	Attenuation to Crosstalk Ratio - Far End (dB/100m)
<b>PSACRF</b>	Power Sum Attenuation to Crosstalk Ratio - Far End (dB/100m)	<b>RL</b>	Return Loss (dB)
<b>TCL</b>	Transverse Conversion Loss (dB/100m)	<b>ELTCTL</b>	Equal Level Transverse Conversion Transfer Loss (dB/100m)

Freq. MHz	IL	NEXT	PSNEXT	ACRF	PSACRF	RL
	STD	STD	STD	STD	STD	STD
1	2	78	75	78	75	20
4	3.7	78	75	78	75	23
8	5.2	78	75	77.2	74.2	24.5
10	5.9	78	75	75.3	72.3	25
16	7.4	78	75	71.2	68.2	25
20	8.3	78	75	69.3	66.3	25
25	9.3	78	75	67.3	64.3	24.3
31.25	10.4	78	75	65.4	62.4	23.6
62.5	14.9	75.5	72.5	59.4	56.4	21.5
100	19	72.4	69.4	55.3	52.3	20.1
155	24	69.5	66.5	51.5	48.5	18.8
200	27.5	67.9	64.9	49.3	46.3	18
250	31	66.4	63.4	47.3	44.3	17.3
300	34.2	65.2	62.2	45.8	42.8	17.3
350	37.2	64.2	61.2	44.4	41.4	17.3
400	40	63.4	60.4	43.3	40.3	17.3
500	45.3	61.9	58.9	41.3	38.3	17.3
550	47.7	61.3	58.3	40.5	37.5	17.3
600	50.1	60.7	57.7	39.7	36.7	17.3
650	52.4	60.2	57.2	39	36	17.3

## Material Specifications

<b>Conductor Material</b>	Bare copper
<b>Insulation Material</b>	Polyolefin
<b>Jacket Material</b>	Low Smoke Zero Halogen (LSZH)
<b>Separator Material</b>	Polyolefin
<b>Shield (Braid) Material</b>	Tinned copper
<b>Shield (Tape) Material</b>	Polyester/Aluminum shield

## Mechanical Specifications

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

## Environmental Specifications

<b>Installation temperature</b>	0 °C to +50 °C (+32 °F to +122 °F)
<b>Operating Temperature</b>	-20 °C to +60 °C (-4 °F to +140 °F)
<b>Acid Gas Test Method</b>	EN 50267-2-3
<b>EN50575 CPR Cable EuroClass Fire Performance</b>	B2ca
<b>EN50575 CPR Cable EuroClass Smoke Rating</b>	s1a
<b>EN50575 CPR Cable EuroClass Droplets Rating</b>	d0
<b>EN50575 CPR Cable EuroClass Acidity Rating</b>	a1
<b>Environmental Space</b>	Low Smoke Zero Halogen (LSZH)
<b>Smoke Test Method</b>	IEC 61034-2

## Packaging and Weights

<b>Cable weight</b>	52.011 kg/km   34.95 lb/kft
<b>Packaging Type</b>	Reel

## Regulatory Compliance/Certifications

<b>Agency</b>	<b>Classification</b>
CENELEC	EN 50575 compliant, Declaration of Performance (DoP) available
CHINA-ROHS	Below maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
REACH-SVHC	Compliant as per SVHC revision on <a href="http://www.commscope.com/ProductCompliance">www.commscope.com/ProductCompliance</a>
ROHS	Compliant
UK-ROHS	Compliant

