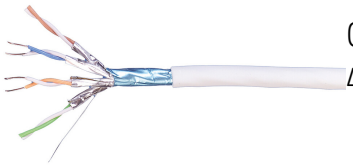
884048458/16 | CS44ZB WHT C6A 4/23 F/FTP RL 500M



CS44ZB Category 6A F/FTP Cable, low smoke zero halogen, white jacket, 4 pair count, 1640 ft (500 m) length, reel

Product Classification

Regional Availability	EMEA
Portfolio	NETCONNECT®
Product Type	Twisted pair cable

General Specifications

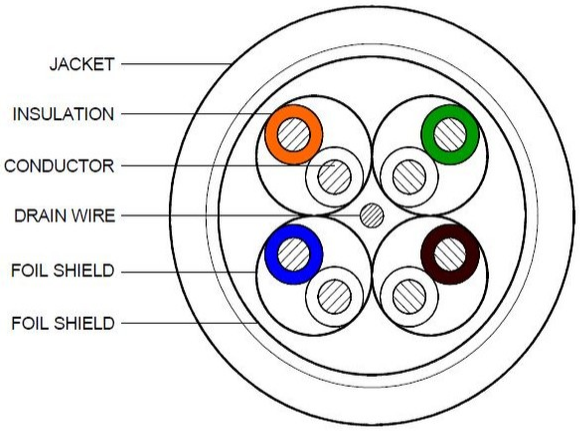
Product Number	CS44ZB
ANSI/TIA Category	6A
Cable Component Type	Horizontal
Cable Type	F/FTP (shielded)
Conductor Type, singles	Solid
Conductors, quantity	8
Jacket Color	White
Pairs, quantity	4
Transmission Standards	ANSI/TIA-568.2-D | ISO/IEC 11801 Class EA

Dimensions

Cable Length	500 m | 1,640.42 ft
Cable Length Tolerance	±5%
Diameter Over Insulated Conductor	1.168 mm | 0.046 in
Diameter Over Jacket, nominal	7.01 mm | 0.276 in
Jacket Thickness	0.635 mm | 0.025 in
Conductor Gauge, singles	23 AWG

Cross Section Drawing

884048458/16 | CS44ZB WHT C6A 4/23 F/FTP RL 500M



Electrical Specifications

Coupling Attenuation	Type II
dc Resistance Unbalance, maximum	2 %
dc Resistance, maximum	7.61 ohms/100 m | 2.32 ohms/100 ft
Mutual Capacitance at Frequency	4.2 nF/100 m @ 1 kHz
Nominal Velocity of Propagation (NVP)	80 %
Operating Frequency, maximum	500 MHz
Operating Voltage, maximum	80 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
Segregation Class	d
Transfer Impedance	Grade 2

Electrical Performance

884048458/16 | CS44ZB WHT C6A 4/23 F/FTP RL 500M

CS
CommScope value

Std
Sandard value

(listed under the Transmission Standards in the Electrical Specifications above)

Typ
Typical value

IL
Insertion Loss (dB/100m)

RL
Return Loss (dB)

NEXT
Near End Crosstalk (dB/100m)

PSNEXT
Power Sum Near End Crosstalk (dB/100m)

ACR
Attenuation to Crosstalk Ratio (dB/100m)

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

PSACR
Power Sum Attenuation to Crosstalk Ratio (dB/100m)

PSACRF
Insertion Loss (dB/100m)

FREQUENCY	IL TYP	IL CS	IL STD	NEXT TYP	NEXT CS	NEXT STD	ACR TYP	ACR CS	ACR STD	PSNEXT TYP	PSNEXT CS	PSNEXT STD	PSACR TYP	PSACR CS	PSACR STD	ACRF TYP	ACRF CS	ACRF STD	PSACRF TYP	PSACRF CS	PSACRF STD	RL TYP	RL CS	RL STD	TCL TYP	TCL CS	TCL STD	ELTCTL TYP	ELTCL CS	ELTCL STD
1.00 MHz	1.9		2.1	98.4		75.3	96.5		73.2	96.6		72.3	94.6		70.2	98.9		68	96.6		65	29		20	61.9		40	61.7		35
4.00 MHz	3.5		3.8	99.9		66.3	96.3		62.5	97.8		63.3	94.2		59.5	98.2		56	95.6		53	30.1		23	55.9		34	56.1		23
8.00 MHz	4.9		5.3	96.1		61.8	91.2		56.4	93.8		58.8	88.9		53.4	94.6		49.9	92.1		46.9	34.9		24.5	57.2		31	56.6		16.9
10.00 MHz	5.5		5.9	95.5		60.3	90.1		54.4	93.3		57.3	87.9		51.4	92.2		48	89.8		45	34.8		25	54.1		30	53.7		15
16.00 MHz	6.9		7.5	93		57.2	86		49.8	90.7		54.2	83.8		46.8	89.1		43.9	86.5		40.9	35.9		25	51.6		28	51.9		10.9
20.00 MHz	7.8		8.4	90		55.8	82.2		47.4	87.6		52.8	79.8		44.4	88.3		42	85.8		39	35.8		25	52.8		27	52		9
25.00 MHz	8.8		9.4	88.5		54.3	79.7		45	86.1		51.3	77.3		42	87.1		40	84.7		37	34.6		24.3	51.6		26	51.3		7
31.25 MHz	9.9		10.5	88.7		52.9	78.8		42.4	86.2		49.9	76.3		39.4	85.5		38.1	83.1		35.1	32.7		23.6	50.7		25.1			
62.50 MHz	14.1		15	86.1		48.4	72		33.4	83.9		45.4	69.7		30.4	79.7		32.1	77.4		29.1	30		21.5	46.5		22			
100.00 MHz	17.9		19.1	79.8		45.3	61.9		26.2	78.4		42.3	60.5		23.2	70.9		28	68.9		25	27		20.1	43.8		20			
155.00 MHz	22.4		24.1	82.1		42.4	59.8		18.4	79.9		39.4	57.6		15.4	69.1		24.2	66.9		21.2	23.4		18.8	40.9		18.1			
200.00 MHz	25.5		27.6	79.6		40.8	54.1		13.2	77.5		37.8	52		10.2	62		22	59.9		19	21		18	39.1		17			
250.00 MHz	28.6		31.1	76.1		39.3	47.5		8.3	74.3		36.3	45.7		5.3	63.9		20	61.4		17	19		17.3	36.5		16			
300.00 MHz	31.4		34.3	70.9		38.1	39.5		3.9	69.6		35.1	38.2		0.9	62.2		18.5	59.9		15.5	18		16.8	35.9					
350.00 MHz	34.1		37.2	73.4		37.1	39.4			72		34.1	37.9			55.6		17.1	53.5		14.1	16.9		16.3	35					
400.00 MHz	36.4		40.1	73.2		36.3	36.8			71.4		33.3	35			54.4		16	52.3		13	16		15.9	34					
500.00 MHz	41.1		45.3	68.8		34.8	27.7			67.1		31.8	26.1			42.9		14	40.7		11	15.2		15.2	33.1					
600.00 MHz	45.3			67.6			22.3			65.7			20.4			43.5			41.1			12.9			31.7					
650.00 MHz	47.1			65.4			18.3			63.5			16.4			38.9			36.6			12.4			31.4					

Material Specifications

Conductor Material	Bare copper
Insulation Material	Polyolefin
Jacket Material	Low Smoke Zero Halogen (LSZH)
Shield (Tape) Material	Polyester/Aluminum shield

Mechanical Specifications

Pulling Tension, maximum	11.34 kg | 25 lb

Environmental Specifications

Installation temperature	0 °C to +50 °C (+32 °F to +122 °F)
Operating Temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Acid Gas Test Method	EN 50267-2-3
EN50575 CPR Cable EuroClass Fire Performance	B2ca
EN50575 CPR Cable EuroClass Smoke Rating	s1a

EN50575 CPR Cable EuroClass Droplets Rating	d1
EN50575 CPR Cable EuroClass Acidity Rating	a1
Environmental Space	Low Smoke Zero Halogen (LSZH)
Smoke Test Method	IEC 61034-2

Packaging and Weights

Cable weight	48,514.145 kg/km | 32600 lb/kft
Packaging Type	Reel

Regulatory Compliance/Certifications

Agency	Classification
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 www.commscope.com/ProductCompliance
ROHS	Compliant
UK-ROHS	Compliant