

549945 Composite - CCTV Plus Audio or Power or Pan and Tilt CCTV Control Applications



Description:

20 AWG bare copper conductor, foam polyolefin insulation, bare copper braid shield, PVC jacket.

Usage (Overall)

Suitable Applications: CCTV plus Audio, Pan and Tilt CCTV Control

Coax

Physical Characteristics

Conductor

AWG:

# Coax	AWG	Stranding	Conductor Material	Dia. (in.)
1	20	Solid	BC - bare Copper	0.032

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
Gas-injected FHDPE - Foam High Density Polyethylene	0.145

Inner Shield

Inner Shield Material:

Type	Inner Shield Material	% Coverage (%)
Braid	BC - Bare Copper	95.000

Applicable Specifications and Agency Compliance Applicable Standards & Environmental Programs

EU CE Mark: Yes

RG Type: 59/U

Electrical Characteristics

Nom. Characteristic Impedance:

Impedance (Ohm)
75

Nom. Inductance:

Inductance (μH/ft)
0.097

Nom. Capacitance Conductor to Shield:

Capacitance (pF/ft)
16.300

Nominal Velocity of Propagation:

VP (%)
83.000

Nominal Delay:

Delay (ns/ft)
1.220

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
10.000

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Nom. Inner Shield DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
3.500

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
1.000	0.300
5.000	0.650
10.000	0.900
50.000	1.900
100.000	2.600
200.000	3.600
400.000	5.000
700.000	7.000
900.000	8.000
1000.000	8.500

Max. Operating Voltage - UL: 350 V RMS

Twisted Pair

Physical Characteristics

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
1	18	7x26	BC - Bare Copper	0.046

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
PP - Polypropylene	0.059

Twisted Pair Color Code Chart:

Number	Color
1	Black and Red

Electrical Characteristics

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
22.500

Physical Characteristics (Overall)

Conductor

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Overall Cabling

Overall Nominal Diameter: 0.232 x 0.450 in.

Mechanical Characteristics (Overall)

Operating Temperature Range: -30°C To +80°C

UL Temperature Rating: 75°C

Bulk Cable Weight: 54 lbs/1000 ft.

Max. Recommended Pulling Tension: 102 lbs.

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Min. Bend Radius (Install)/Minor Axis: 2.500 in.

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification: CMG

NEC Articles: 800

CEC/C(UL) Specification: CMG

EU Directive 2000/53/EC (ELV): Yes

EU Directive 2002/95/EC (RoHS): Yes

EU RoHS Compliance Date (mm/dd/yyyy): 01/01/2005

EU Directive 2002/96/EC (WEEE): Yes

EU Directive 2003/11/EC (BFR): Yes

CA Prop 65 (CJ for Wire & Cable): Yes

MII Order #39 (China RoHS): Yes

Flame Test

UL Flame Test: UL1685 UL Loading

C(UL) Flame Test: FT4

Suitability

Suitability - Indoor: Yes

Suitability - Outdoor: Yes

Suitability - Aerial: Yes

Plenum/Non-Plenum

Plenum (Y/N): No

Plenum Number: 649948

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
549945 0091000	1,000 FT	53.000 LB	WHITE	C	1 #18 PR, 1 RG-59/U COAX
549945 009500	500 FT	28.000 LB	WHITE	C	1#18,1RG-59/U COAX
549945 0101000	1,000 FT	53.000 LB	BLACK	C	1#18,1RG-59/U COAX
549945 010500	500 FT	28.000 LB	BLACK	C	1#18,1RG-59/U COAX

Notes:

C = CRATE REEL PUT-UP.

Sound, Security and Alarm Cables

Cable Finder Guide — Coax and Composite



Coax Series or Component Type	AWG Size	Stranding	Non-Plenum				Plenum			
			Part No.	Rating	Shield/Braid Coverage	Page No.	Part No.	Rating	Shield/Braid Coverage	Page No.
CATV/MATV Coax										
RG-59/U	20	Solid	—	—	—	—	6439C8	CMP	Duofoil + 80% Aluminum	20.49
	20	Solid	—	—	—	—	6439Q8	CMP	Quad Shield	20.49
RG-6/U	18	Solid	5339B5	CM	Duofoil + 60% Aluminum	20.48	633938	CMP	Duofoil + 90% Aluminum	20.49
	18	Solid	5339Q5	CM	Quad Shield	20.48	6339Q8	CMP	Quad Shield	20.49
RG-11/U	14	Solid	—	—	—	—	6139B8	CMP	Duofoil + 60% Aluminum	20.49
CCTV Coax										
Mini 59	25	Solid	573945	CM	94% Bare Copper	20.37	673948	CMP	95% Bare Copper	20.39
RG-59/U	22	7	551945	CM	95% Bare Copper	20.37	—	—	—	—
	20	Solid	543945	CM	95% Bare Copper	20.37	643948	CMP	95% Bare Copper	20.39
RG-6/U	18	Solid	533945	CM	95% Bare Copper	20.37	633948	CMP	95% Bare Copper	20.39
RG-11/U	14	Solid	513945	CM	95% Bare Copper	20.37	613948	CMP	95% Bare Copper	20.39
CCTV Coax, Surveillance										
RG-59/U	20	Solid	—	—	—	—	7986LC	CMP	95% Bare Copper	20.50
RG-6/U	18	Solid	—	—	—	—	7985LC	CMP	95% Bare Copper	20.50
CATV Coax, Water-blocked										
RG-59/U	20	Solid	5439W5	CM	Duofoil® + 95% TC	20.37	—	—	—	—
RG-6/U	18	Solid	5339W5	CM	Duofoil + 60% Aluminum	20.37	—	—	—	—
Security Coax										
RG-62	22	Solid	—	—	—	—	6539Y8	CMP	95% Bare Copper	20.39
Schlage Coax										
RG-6/U	18	Solid	5399B5	CM	Duobond® + 60% Alum.	20.48	—	—	—	—
CCTV Composite Coax with Unshielded Pair for Control or Power										
Mini RG-59	25	Solid	579945	CM	95% Bare Copper	20.38	679948	CMP	95% Bare Copper	20.38
UTP	20	7	—	—	Unshielded	—	—	—	Unshielded	—
RG-59	20	Solid	549945	CM	95% Bare Copper	20.38	649948	CMP	95% Bare Copper	20.38
UTP	18	7	—	—	Unshielded	—	—	—	Unshielded	—
RG-6	18	Solid	539945	CM	95% Bare Copper	20.38	639948	CMP	95% Bare Copper	20.38
UTP	18	7	—	—	Unshielded	—	—	—	Unshielded	—
Pan/Tilt/Zoom BananaPeel Composite Coax										
RG-59/U	20	Solid	500PTZ	CMR	95% Bare Copper Braid	20.42	600PTZ	CMP	95% Bare Copper Braid	20.43
1UTP	23	Solid	—	—	Unshielded	—	—	—	Unshielded	—
2/C	18	7	—	—	Unshielded	—	—	—	Unshielded	—
RG-59/U	20	Solid	501PTZ	CMR	95% Bare Copper Braid	20.44	601PTZ	CMP	95% Bare Copper Braid	20.45
1STP	22	7	—	—	Beldfoil®	—	—	—	Beldfoil	—
2/C	18	7	—	—	Unshielded	—	—	—	Unshielded	—
RG-59/U	20	Solid	502PTZ	CMR	95% Bare Copper Braid	20.46	602PTZ	CMP	95% Bare Copper Braid	20.47
1STP	18	7	—	—	Beldfoil	—	—	—	Beldfoil	—
2/C	18	7	—	—	Unshielded	—	—	—	Unshielded	—
CCTV Surveillance UTP and Composite Cables										
2/C	16	19	5284US	CMR	Unshielded	20.51	6284US	CMP	Unshielded	20.52
2TP	24	Solid	—	—	Unshielded	—	—	—	Unshielded	—
2/C	16	19	5284UE	CMR	Unshielded	20.51	6284UE	CMP	Unshielded	20.52
2TP	23	Solid	—	—	Unshielded	—	—	—	Unshielded	—
2/C	16	19	5288US	CMR	Unshielded	20.51	6288US	CMP	Unshielded	20.52
4TP	23	Solid	—	—	Unshielded	—	—	—	Unshielded	—
4TP	24	Solid	1583A	CM	Unshielded	20.40/53	1585A	CMP	Unshielded	20.41/54
4TP	24	Solid	1500A	CM	Unshielded	20.40/53	1501A	CMP	Unshielded	20.41/54
4TP	24	Solid	1583R	CMR	Unshielded	20.40/53	—	—	—	—
2TP	24	Solid	1500R	CMR	Unshielded	20.40/53	—	—	—	—
4TP	23	Solid	7881A	CMR	Unshielded	20.40/53	7882A	CMP	Unshielded	20.41/54
Access Control BananaPeel® Composite Cables										
4/C	18	7	558AFS	CMR	Beldfoil	20.36	658AFS	CMP	Beldfoil	20.35
3TP	22	7	—	—	Beldfoil	—	—	—	Beldfoil	—
4/C	22	7	—	—	Beldfoil	—	—	—	Beldfoil	—
2/C	22	7	—	—	Beldfoil	—	—	—	Beldfoil	—
4/C	16	19	538AFS	CMR	Beldfoil	20.36	638AFS	CMP	Beldfoil	20.35
3TP	18	7	—	—	Beldfoil	—	—	—	Beldfoil	—
4/C	18	7	—	—	Beldfoil	—	—	—	Beldfoil	—
2/C	18	7	—	—	Beldfoil	—	—	—	Beldfoil	—

STP = Shielded Twisted Pair • TC = Tinned Copper • TP = Twisted Pair(s) • UTP = Unshielded Twisted Pair • /C = Conductor(s) (Multi-conductor)

Security Composite Cable

CCTV plus Audio or Power or Pan and Tilt CCTV Control Applications
Plenum-Rated and Non-Plenum



Non-Plenum Composite Coax plus Twisted Pair

CM FT1 or CMG-LS FT4 Rated

Product Description

Coax: Solid bare copper conductor, foam polyolefin insulation, bare copper braid shield. Black PVC jacket (1306SB has Black LSZH jacket).

Pair: Stranded bare copper conductor, PVC insulation, Black PVC jacket. (1306SB has polypropylene insulation. Black LSZH jacket.) Color coded: Black & Red.

Plenum-Rated Composite Coax plus Twisted Pair

CMP FT6 Rated

Product Description

Coax: Solid bare copper conductor, FEP insulation, bare copper braid shield, Natural Flamarrest® jacket.

Pair: Stranded FEP insulation, Natural Flamarrest jacket. Color coded: Black & Red.

Coax and pair in Siamese configuration.
Sequential footage marking every two feet.

Specifications

Conductor	Bare Copper
Insulation (Non-Plenum)	FPO Coax Pair PVC
Insulation (Plenum)	FEP
Shield (Coax)	Bare Copper Braid
Jacket	PVC Non-Plenum Flamarrest Plenum
Approvals (Non-Plenum)	CM NEC CEC CM FT1
Approvals (LSZH)	CMG-LS NEC CEC CMG-LS FT4 Limited Smoke
Approvals (Plenum)	CMP NEC CEC CMP FT6
NEC Articles	800
Nominal Impedance (Coax)	75Ω
Temperature Rating	75°C

Applications

- CCTV plus Audio or Power
- Pan, Tilt and Zoom CCTV Control



Part No.	AWG	Stranding and Conductor	Shield/Braid Coverage	Insulation Nominal OD		Nominal OD		Standard Lengths		Standard Unit Weight	
				Inch	mm	Inch	mm	Ft.	m	Lbs.	kg

CM-Rated Composite (NEC CM and CEC CM FT1)

Mini RG-59 Type											
579945 <small>new</small>	25(cx)	solid BC	95% BC	.085	2.16	.151	3.84	500	152	15.0	6.8
	20(pr)	7/w BC	unshielded	.056	1.42	x	x	1000	305	29.0	13.2
						.332	8.43				

RG-59 Type											
549945	20(cx)	solid BC	95% BC	.145	3.68	.232	5.89	500	152	30.0	13.6
	18(pr)	7/w BC	unshielded	.066	1.68	x	x	1000	305	60.0	27.3
						.460	11.68				

RG-6 Type											
539945	18(cx)	solid BC	95% BC	.180	4.57	.266	6.76	500	152	34.0	15.5
	18(pr)	7/w BC	unshielded	.066	1.68	x	x	1000	305	69.0	31.3
						.500	12.70				

CMG-LS -Rated Composite (NEC CMG-LS and CEC CMG-LS FT4 Limited Smoke)

RG-6 Type											
1306SB <small>new</small>	18(cx)	solid BC	95% BC	.180	4.57	.275	6.99	500	152	37.0	16.8
	18(pr)	7/w BC	unshielded	.059	1.59	x	x	1000	305	76.0	34.5
						.514	13.06				

Plenum-Rated Composite (NEC CMP and CEC CMP FT6)

Mini RG-59 Type											
679948* <small>new</small>	25(cx)	solid BC	95% BC	.078	1.98	.144	3.66	500	152	16.5	7.4
	20(pr)	7/w BC	unshielded	.048	1.22	x	x	1000	305	34.0	15.5
						.328	8.33				

RG-59 Type											
649948	20(cx)	solid BC	95% BC	.134	3.40	.199	5.05	500	152	29.0	13.2
	18(pr)	7/w BC	unshielded	.059	1.50	x	x	1000	305	54.0	24.5
						.383	9.72				

RG-6 Type											
639948	18(cx)	solid BC	95% BC	.170	4.32	.232	5.89	500	152	32.0	14.5
	18(pr)	7/w BC	unshielded	.059	1.50	x	x	1000	305	60.0	27.2
						.416	10.57				

BC = Bare Copper • cx = Coax • pr = Pair • LSZH = Low-Smoke, Zero-Halogen

*679948 also available in White.