

7949A Composite - Composite Data, Audio, Video, Security and Control Cable



For more Information
please call

1-800-Belden1



General Description:

Composite - (1) Cat 5e 4-bonded-pair UTP 24 AWG, (4)16 AWG stranded (65x34) bare copper conductors, polyolefin insulation (pairs), PVC insulation (conductors), overall F-R PVC jacket. Jacket sequentially marked.

Usage (Overall)

Suitable Applications:

Keypads, Control Panels, Touch Panel Controls, Home Theater, A/V Equipment, Projectors, Screens, Window Treatments, Lighting, Security, Security Cameras, Home Automation, Energy Control

Twisted Pair

Physical Characteristics

Conductor

AWG:

# Pairs	AWG	Stranding	Conductor Material	Dia. (in.)
4	24	Solid	BC - Bare Copper	0.020

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
PO - Polyolefin	0.038

Twisted Pair Color Code Chart:

Number	Color
1	White/Blue Stripe and Blue
2	White/Orange Stripe and Orange
3	White/Green Stripe and Green
4	White/Brown Stripe and Brown

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Outer Jacket Diameter:

Nom. Dia. (in.)
0.200

Outer Jacket Ripcord:

Yes

Outer Jacket Color Code Chart:

Color
Blue

Electrical Characteristics

Premise Cable Electrical Table 1:

Freq. (MHz)	Max. Attenuation (dB/100 m)	Min. PSNEXT (dB)	Min. PSACR (dB)	Min RL (dB)
1.0	2.000	62.3	60	20.000
4.0	4.100	53.3	49	23.000
8.0	5.800	48.8	43	24.500
10.0	6.500	47.3	41	25.000
16.0	8.200	44.3	36	25.000
20.0	9.300	42.8	34	25.000
25.0	10.400	41.3	31	24.300
31.25	11.700	39.9	28	23.600
62.5	17.000	35.4	19	21.500
100	22.000	32.3	11	20.100

Premise Cable Electrical Table 2:

Freq. (MHz)	Input (Unfitted) Imp. (Ohms)	Min. PSELFEXT (dB)
1.0	100 ± 15	60.8
4.0	100 ± 15	48.7
8.0	100 ± 15	42.7

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10.0	100 ± 15	40.8
16.0	100 ± 15	36.7
20.0	100 ± 15	34.7
25.0	100 ± 15	32.8
31.25	100 ± 15	30.9
62.5	100 ± 15	24.8
100	100 ± 15	20.8

Multi Conductor

Physical Characteristics

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material	Dia. (in.)
4	16	65x34	BC - Bare Copper	0.059

Insulation

Insulation Material:

Insulation Material	Dia. (in.)
PVC - Polyvinyl Chloride	0.079

Insulation Color Code Chart:

Number	Color
1	Red
2	White
3	Green
4	Black

Electrical Characteristics

Nom. Capacitance Conductor to Conductor:

Capacitance (pF/ft)
15.000

Nominal Velocity of Propagation:

VP (%)
70.000

Maximum Conductor DC Resistance:

DCR @ 20°C (Ohm/100 m)
9.380

Max. Operating Voltage - UL:

Voltage
300 V RMS

Max. Recommended Current:

Current
5 Amps per conductor @ 25°C

Other Electrical Characteristic 1:

Third party verified to TIA/EIA-568/B.2, Category 5e

Physical Characteristics (Overall)

Conductor

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Outer Jacket

Outer Jacket Material:

Outer Jacket Material
PVC - Polyvinyl Chloride

Outer Jacket Ripcord:

Yes

Overall Cable

Overall Nominal Diameter:

0.355 in.

Mechanical Characteristics (Overall)

Operating Temperature Range:

-20°C To +75°C

Bulk Cable Weight:

89 lbs/1000 ft.

Max. Recommended Pulling Tension:

160 lbs.

Min. Bend Radius/Minor Axis:

4.500 in.

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Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMG
EU Directive 2011/65/EU (ROHS II):	Yes
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	04/01/2005
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
Other Specification:	NEMA WC-63.1, Category 5e

Flame Test

UL Flame Test:	UL1666 Vertical Shaft
CSA Flame Test:	FT4

Plenum/Non-Plenum

Plenum (Y/N):	No
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Electrical Characteristics (Overall)

Max. Operating Voltage - UL:

Voltage
300 V RMS

Notes (Overall)

Notes: Overall jacket sequentially marked.

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc
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Revision Number: 0 Revision Date: 08-05-2013

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