Technical Requirements

RG59 Coax Cable + 2 DC

P/N: 2085

Description

BoostWires RG59 Coaxial cable for camera with DC power 305 meter wooden roll



1. Basic information:

Support

- ANSI/SCTE 74 2003 RF Specification for Coaxial Cable
- EN 50117-1:2002 Coaxial Cable
- NEC Article 820, CATV

Application

- For audio and power transmission
- Light Duty PVC Jacket Flexible Cord
- Ordinary Duty PVC Jacket Flexible Cord
- Wire For Internal Wiring Of Equipment
- CCTV cable RG59+2 DC power

Characteristics

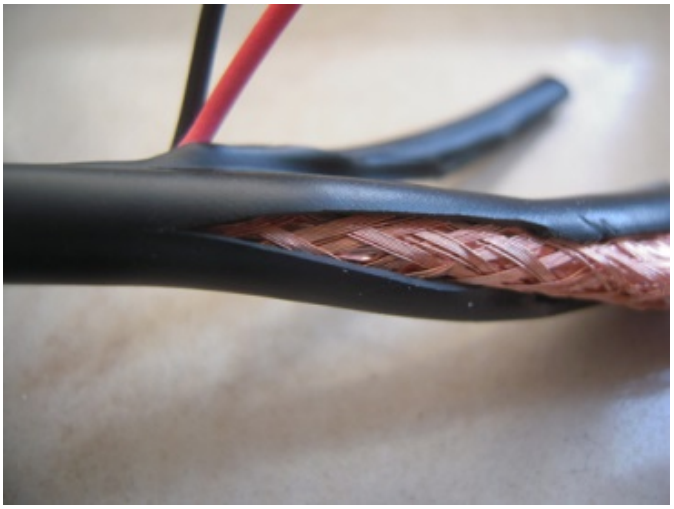
1), Dielectric Strength: Conductor to Shield: 2000VDC
2), Impedance: 75+2 Ohm
5), DCR: Conductor: 10.5 Ohms/1000Ft. (Nom.) Coax
6), Return Loss: 20dB min (5-860MHz)
7), 15dB min(860-2500MHz)
8), SRL: 20dB (10-350MHz) 100% Swept Tested

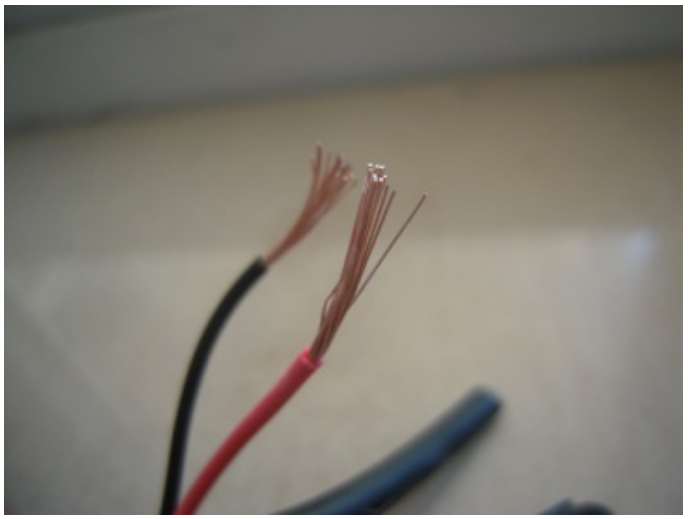
2. Cable Labeling:

BoostWires 2085 RG59 MIL. C-17G 75Ω & 2DC wire XXXm

3. Physical Specifications

Item		Unit	Specification
Conductor	Number		1
	Material		CCS (25% Copper)
	Construction		solid
	Diameter	mm	0.61
Insulation	Material		Solid PE
	Min. Thickness	mm	3.7
Shielding	Material		
	Min. Thickness	mm	
Braiding	Material		Aluminum (golden color)
	Min. Thickness	mm	0.12
	Number of braids		112
DC Wires	Material		CCA (25% Copper)
	Min. Thickness	mm	0.2mm
	Number of DC wires (stranded)		16
	DC wires PVC Jacket	mm	0.5±0.02
Jacket	Material		PVC Jacket (the top of surface is new. the bottom is recycled)
	Min. Thickness	mm	0.5±0.02
	Overall diameter	mm	6.0





4. Electrical Specifications

Characteristic Impedance	75,0 Ω ± 3,0 Ω
Propagation velocity	85%
Transfer Impedance (5-30MHz)	≤ 5,0 mΩ
Screening attenuation (30-1000MHz), dB	≥ 85,0 dB
Return Loss 5-30MHz 30-470MHz 470-1000MHz	 ≥23,0 dB ≥23,0 dB ≥20,0 dB
Nominal Capacitance	16.2 pF/ft (53.2 pF/m)
Insulation Resistance	$>10^4$MΩ
Center Conductor Resistance@68°F (20°C)	<49.2 Ω/1000ft (161.4 Ω/km)
DC Loop Resistance	<58.0 Ω/1000ft (190.3 Ω/km)

5. Mechanical Specifications

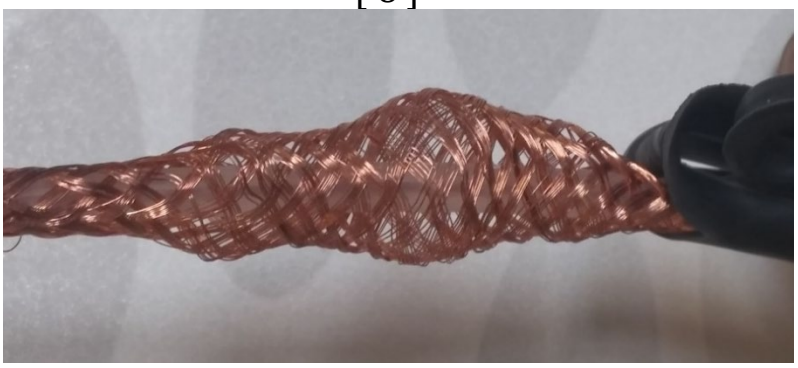
Minimum Bend Radius	0.875 Inches (22.230mm)
Center Conductor Minimum Break Strength	41.3 kgf (405 N)
Center Conductor Bond To Dielectric	>5 lbs (2.3 kg)
Shield overlap	>18%
Thermal Oxidative Stability (Life time)	-40°C to 90°C @ 336h After aging:70% of Initial value.
UV Stable	The jacket material shall be UV stable, as defined in UL 1581, Paragraph 1200.
Safety against fire	The jacket material will be protected from fire, as defined at NEC Article 820.

6. Drop Cable Maximum Attenuation @ 68ºF (20ºC):

Frequency (MHz)	dB/100ft	dB/100m
5	0.86	2.82
55	2.05	6.73
211	3.80	12.47
250	4.10	13.45
270	4.22	13.85
300	4.45	14.60
330	4.66	15.29
350	4.80	15.75
400	5.10	16.73
450	5.40	17.72
500	5.70	18.70
550	5.95	19.52
600	6.20	20.34
750	6.97	22.87
870	7.57	24.85
1000	8.12	26.64

7. Test Scenarios for 2085

Test number	Test scenarios	expected result
1	Take 10 meter cable from 2085, connect 2 connectors (3-parts) from each side of the cable, connect the cable to the DVR from one side to camera in the second side. Check the picture quality, sharpness, colors and pixels. Use 12V/2A power supply	
2	Take 150 meter cable from 2085, connect 2 connectors (3-parts) from each side of the cable, and connect the cable to the DVR from one side to camera in the second side. Check the picture quality, sharpness, colors and pixels. Use 12V/2A power supply	quality in all aspects MUST not be lower than test number 1
3	Take 150 meter cable from 2085,enter 12V/2A to one side of the power cable using FLUKE check the power in the second side.	12V
4	Take 150 meter cable from 2085,enter 12V/2A to one side of the power cable and other side to the camera, using FLUKE check the power in the second side.	12V
5	Take 150 meter cable from 2085,enter 12V/2A to one side of the power cable and other side to the camera, using FLUKE check the AMPER in the second side.	2A
6	DC cables are not broke after 20 bands	not broken
7	Conductor is not broke after 20 bands	not broken
8	Bradding is not broken after 10 bands. **Bradding is not disintegrating when touched and bent, Bradding need to stay flexible and not crumble when pushed down** **The Bradding needs to return to its original shape after you bend it without leaving braiding wires on the floor. Please see attached picture.**	
9	Bradding is not rusting in water after 24 hour	not rusting
10	when stretching the cable, the conductor is not enter inside cable. Need to strech with the jacket. That related to the conductor and the DC wires.	not entery the jacket in the DC and in the conductor
11	Insulation is taken off from the DC wires with no left material on the wires.	clean DC conductor
12		



7. Reels Marking:

Each reel should contain 305m Cable, and should be marked with a sticking containing the following information:

Item: RG59 + 2DC Wires
P/N:2085
Length: 305m
NW: 16 KG
GW: 17.5 KG

Reel for example:



8. Carton box packing

a. Carton box size dimension = 33*33*33
b. Each outer box will contain 1 wooden roll
c. Each Carton box will have the printing on its front side:

(1) ITEM: RG59 + 2DC Wires
(2) P/N: 2085
(3) QTY: 1 PCS / 305m

(4) NW: 16 Kgs
(5) GW: 17.5 Kgs
(6) Size: 33*33*33

Please see carton box example



9. Shipping Marks

The 2 other opposite sides of the box should have RBS logo on them
Example:



Note: make sure that every Outside (cover) Box will have a different number.