

CCX159

Contractor RG59/U 75Ω coaxial video cable



The CCX159 is a coaxial installation cable featuring a Flamoflex™ outer jacket compliant to the IEC 60332-1 standard regarding fire and flammability resistance in public installations. The Flamoflex™ material is specifically designed with installers convenience in mind, offering a smooth and durable outer jacket for easy installation and pulling. The construction is designed according the RG59/U standard, featuring a solid high purity copper conductor which is surrounded by polyethylene isolator. The double shielding consisting of an overall aluminum foil surrounded by a braiding offers a high immunity against noise and interference caused by external devices.

The CCX159 can be used for a wide variety of installation applications such as CATV and CCTV distribution, analogue video interconnections as well as HDTV digital SDI, HD-SDI and 3G-SDI video transmissions.



INSTALL

Physical Characteristics	
Type of cable	RG59/U 75Ω coaxial video cable
Inner conductor	BC 1 x 0.643 mm (OFC)
Inner conductor section	0.32 mm ²
Number of conductors	1
Insulation	Foamed PE Ø 3.7 mm
Insulation Colour	White
Shielding 1	Al-Mylar (single sided) 100% coverage - 25% Overlap
Shielding 2	Braiding TC 12 x 5 x 0.10 mm > 50% coverage
Separator	None
Outer Jacket	NHFR
Outer Jacket Colour	Black
Outer Jacket Dimensions	Ø 6.0 mm
American Wire Gauge	22 AWG

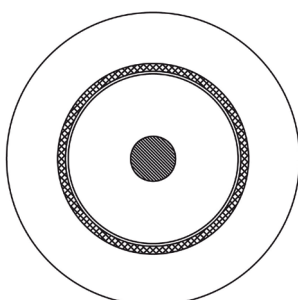
Standards & regulations	
RoHS2 compliant	According EU Directive 2011/65/EU
Reach compliant	According EC 1907/2006
Flammability test	According IEC 60332-1
Indoor / outdoor	UV resistant (UL1581, UVA, 720 h)
Circuit integrity	n/a
Smoke emissions	According IEC 61034
Zero halogen compounds	According EN 50267-2-1, IEC 60754
Cabling standard	RG59/U

Mechanical Characteristics		
Temperature range	fixed installation	-20° C till +80° C
	flexible installation	-15° C till +60° C
Bending radius	fixed installation	8 x cable Ø OD
	flexible installation	10 x cable Ø OD

Electrical Characteristics	
Dielectricum Σr	
Max. conductor DC resistance	54.3 (Ω/Km)
Conductor to shield Nom. Capacitance	(pF/m)
Nom. Velocity of propagation	%
Nom. Delay	(ns/m)
Dielectric strenght	0.5 (KV/1min. DC)
Nom. shield DC resistance	31.8 (Ω/Km)
Characteristic impedance	75Ω +/-5Ω
Voltage rating	300V

Ordering & packaging		
CCX159/1	NHFR, IEC 60332-1, Black	100 meter plastic reel

Cross section



Recommended accessories & connections

BNC connector	Neutrik	NBNC75BLP7
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Additional specifications



Attenuation nom.														
Frequency (MHz)	1	5	10	25	100	180	270	360	540	720	1000	1500	3000	4500
Attenuation (dB/100m)	1.10	2.80	3.937	5.906	10.926	13.30	16.00	18.40	22.54	26.50	32.00	40.20	60.699	74.807

Max attenuation = Nom x 1.15

Min. Return loss		
Frequency in MHz	5 MHz ~ 1600 MHz	1600 MHz ~ 4500 MHz
Return loss (dB/100m)	> 20 dB	> 15 dB

Recommended Transmission distance at Serial Digital Data rates				
Data Rate	270 Mb/s	360 Mb/s	1.5 Gb/s	3 Gb/s
Standard	SMPTE 259 M Component SD-SDI	SMPTE 259 M Widescreen SD-SDI	SMPTE 292M HD-SDI	SMPTE 424M 3G-SDI
Example video formats	480i	576i	720p / 1080i	1080p
Recommended distance (CCX159)	262 meter	223 meter	67 meter	45 meter

Recommended length values are based on typical attenuation values by 30 dB loss at 1/2 clock frequency, but are depending on equalizer on receiving side. Recommendations are based on 20 dB equalizer, but can increase depending of the used equalizer.