Vandamme cable

Standard 75 Ohm Plasma Grade video coaxial cable

Van Damme Standard 75 Ohm Plasma Grade Video Coax is a high resolution cable designed for use with analogue video signals. Precision performance is combined with flexibility usually only found in microphone cables resulting in an excellent video cable for dynamic use in the broadcast, video and presentation markets.

Applications

- Analogue video transmission up to 100 metres
- Suitable for SP Dif digital audio and word clock

Application notes

- Can be used with serial digital video transmissions up to 138 metres
- Uses RG59 type crimp connectors
- Colour coding suitable for RGBHV, RGBS, YUV and other video formats
- Ultra pure oxygen free copper for outstanding sonic integrity

Transmission length guidelines

These transmission lengths have been calculated throughout to a maximum attenuation of -30dB at the frequency corresponding to half of the actual signal data rate for SMPTE 259. SMPTE and others advise that 90% of this cable length introduces an appropriate safety factor - this has been taken into account in the chart below.

	SMPTE 259			
Data rate (clock)	143Mb/s	177Mb/s	270Mb/s	360Mb/s
½ Clock Rate	72MHz	89MHz	135MHz	180MHz
Recommended transmission length	212m	191m	159m	138m

standard 75 series

Mechanical Specifications		
Conductor	Material	Bare ultra pure oxygen free copper
	Stranding	7x 0.20mm (0.22mm²) AWG 24/7
Dielectric	Material	Polyethylene
	Average thickness	1.55mm
	Diameter	3.73mm ± 0.03
Screen	Material	Bare oxygen free braided copper wire
	Coverage	95%
	Dimension	16x9x0.12mm
Overall Jacket	Material	Flexible PVC; colours as follows
		Jet Black RAL 9005
		Flame Red RAL 3000
		Mint Green RAL 6029
		Sky Blue RAL 5015
		Light Ivory (Cream) RAL 1015
	Average thickness	0.95mm
	Overall diameter	6.15mm
Bend radius		15 x overall diameter
Cable weight		50 Kg/Km
Physical properties unaged		
Jacket (@ 60°C)	Tensile strength	> 10 N/mm²
	Elongation	> 125 %
	Heat Shock Test	150°C x 1 hour / No cracks
Electrical Specifications		
Resistance	Conductor	85 Ohm/Km
	Shield	13 Ohm/Km
	Insulation	> 5000 M Ohm/Km
Voltage test		7000V DC 1 minute OK
Capacitance		67 pF/m
Velocity of propagation		66%
Impedance at 10MHz		75 Ohms ± 2
Attenuation	10 MHz	4.21 dB/100m
	100 MHz	13.32 dB/100m
	135 MHz	15.08 dB/100m
	180 MHz	17.42 dB/100m
	200 MHz	18.36 dB/100m
	400 MHz	28.11 dB/100m
	743 MHz	38.31 dB/100m

Structural return loss