

VAN DAMME 278-975-000 HD VISION RG59/U COAX LSZH



The Van Damme HD Vision RG59/U precision coaxial cable has been designed with exacting electrical characteristics and mechanical tolerances to ensure trouble free performance with SMPTE 424M and 292M HD-SDI signals as well as SDI and analogue video.

Applications & Application Notes

- Transmission of HD-SDI, SDI and analogue video signals
- Installation in public buildings, schools and colleges, government premises and marine vessels
- Jacket material specified as the thermoplastic polymer SHF1 or a special LSZH polymer; both compliant with IEC 60092 Electrical Installations in ships pt. 359 – Sheathing materials for shipboard power and communication cables
- Fully tested and compliant with the following IEC standards
 - IEC 60332.1 Fire retardancy of a single cable
 - IEC 60754.1 Amount of Halogen Gas Emissions
 - IEC 60754.2 Degree of acidity of released gases
 - IEC 61034.2 Measurement of smoke density
- Use of precision 75 Ohm components throughout any signal chain is imperative

Recommended Transmission Lengths

Stock code	SMPTE 259				SMPTE 292	SMPTE 424	
	Data rate (clock)	143Mb/s	177Mb/s	270Mb/s	360Mb/s	1.485Gb/s	2.97Gb/s
	½ Clock Rate	72MHz	89MHz	135MHz	180MHz	743MHz	1485MHz
	Recommended maximum transmission lengths						
278-975-000		316m	284m	230m	188m	58m	42m

Mechanical Specifications

Conductor	Material	Bare ultra pure oxygen free copper
	Stranding	1 x 0.81mm
Dielectric	Material	Gas injected Foam skin polyethylene
	Average thickness	1.45mm
	Diameter	3.7mm \pm 0.15
Screen 1	Type	Aluminium/polyester foil 125% coverage
Screen 2	Material	Tinned ultra pure oxygen free copper
	Coverage	95%
Overall Jacket	Material	LSZH polymer Water blue RAL 5021
	Average thickness	0.80mm
	Overall diameter	5.90mm \pm 0.30

Electrical specifications

Resistance	Conductor	<35 Ohm/km
	Shield	10 Ohm/km
	Insulation	>5000 MOhm/km
Voltage test		1000V DC 1 minute OK
Capacitance		56 pF/m
Velocity of propagation		83%
Impedance at 10MHz		75 Ohms \pm 1.0
Attenuation	5 MHz	1.73 dB/100m
	10 MHz	2.70 dB/100m
	100 MHz	7.27 dB/100m
	135 MHz	8.45 dB/100m
	180 MHz	10.21 dB/100m
	200 MHz	10.76 dB/100m
	270 MHz	12.50 dB/100m
	400 MHz	15.40 dB/100m
	743 MHz	21.97 dB/100m
1485 MHz	31.30 dB/100m	