

## VAN DAMME 278-775-000 HD VISION MINI COAX LSZH



The Van Damme HD Vision Miniature 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
- Low overall diameter for Outside Broadcast vehicles and high density patch panels
- 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	Data rate (clock)	SMPTE 259				SMPTE 292	SMPTE 424
		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					
278-775-000		148m	132m	108m	66m	29m	20m

## Mechanical Specifications

Conductor	Material	Bare ultra pure oxygen free copper
	Stranding	1 x 0.41mm
Dielectric	Material	Gas injected Foam skin polyethylene
	Average thickness	0.30mm
	Diameter	1.90mm
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	
	Overall diameter	3.10 mm $\pm$ 0.15

## Electrical specifications

Resistance	Conductor	<145 Ohm/km
	Shield	
	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	4.40 dB/100m
	10 MHz	6.10 dB/100m
	100 MHz	17.90 dB/100m
	135 MHz	20.80 dB/100m
	180 MHz	24.00 dB/100m
	200 MHz	25.30 dB/100m
	270 MHz	29.40 dB/100m
	400 MHz	35.80 dB/100m
	743 MHz	47.98 dB/100m
1485 MHz	63.70 dB/100m	