

#### Purple Series Digilog Ecoflex AES/Analogue installation cable LSZH

Van Damme Purple Series Digilog Ecoflex is a Low Smoke Zero Halogen (LSZH) jacketed audio multicore specifically for installation use. The use of LSZH cables is becoming a specified essential in public buildings and new build construction projects. Based electrically and mechanically on the Van Damme Green Series range this cable will carry AES/EBU and/or analogue balanced audio as well as paired data signals such as RS485, RS422 and DMX512.

#### **Applications**

- Installed AES/EBU digital or analogue audio cable infrastructure requiring LSZH construction
- $\bullet$  Any 100 to 110 Ohm balanced data application such as RS422, RS485, DMX512 and timecode
- Installation in marine vessels, schools and colleges, government premises and public buildings
- Equipment rack wiring where LSZH materials have been specified

#### Application notes

- For the transmission of analogue and digital audio, paired data and midi signals in an installation environment from 1 8 pairs
- Multicore types have 26AWG conductors for a reduced overall diameter
- Jacket material specified as the thermoplastic polymer SHF-1; 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 (see glossary for full description)
- IEC 60332.1 Fire resistance of a single cable
- IEC 60754.1 Amount of Halogen Gas Emissions
- IEC 60754.2 Degree of acidity of released gases
- IEC 60134.2 Measurement of smoke density
- Ultra pure oxygen free copper for outstanding sonic integrity

# purple series

## Multicore cables 2, 4, and 8 pairs

Pair specifications						
Conductor	Material	Bare ultra pure oxygen free copper wire				
	Stranding	7 x 0.16mm (0.14mm²) AWG 26/7				
Insulation	Material	Foam skin polyolefin				
	Average thickness	0.30mm	0.30mm			
	Diameter	1.10mm ±0.10				
	Colour coding	Red/Blue				
Cabling	Туре	Twisted pair				
	Lay length	~25mm				
Screen	Туре	24µm Aluminium/polyester foil >150% coverage				
	Drain wire 7 x 0.16 (0.14mm <sup>2</sup>					
Jacket	Material SHF-1 LSZH polyme		ed Lilac RAL 4001			
	Average thickness		0.30mm			
	Overall diameter	2.90mm ±0.10				
Overall jacket						
Overall jacket	Material SHF-1 LSZH thermoplas		stic polymer			
	Colour Red Lilac RAL 4001					
	Average thickness	See characteristics by s	stock code			
Bend radius		10 x overall diameter				
Physical properties	unaged					
Jacket (at 60°C)	Tensile strength		>9N/mm²			
(	Elongation		>125%			
	Heat shock test		150 °C x 1 hour - no cracks			
Halogen Emissions	0.30% Halogen acid gases accordir		ng to IEC 60754-2			
Electrical characteri	stics					
Resistance	Conductor		Ohm/Km	<144		
	Shield			<140		
	Insulation		M Ohm/Km	>5000		
Capacitance	Core to core		pF/m	50 nominal		
· ·	Core to s	hield		100 nominal		
Impedance			110 Ohms ±20%			
Attenuation at 3 MHz		7.05 dB/100m				
Test voltage			1000 Vdc x 1 minute OK			

278-418-000 UPOFC PRE-JACKETE



## 1 pair cable 278-401-000

Pair specifications				
Conductor	Material	Bare ultra pure oxygen free copper wire		
	Stranding	7 x 0.20mm (0.22mm²) AWG 24/7		
Insulation	Material	Foam skin polyolefin		
	Average thickness	0.20mm		
	Diameter	1.40mm ±0.10		
	Colour coding	Red/black		
Cabling	Туре	Twisted pair		
	Lay length	~25mm		
Screen	Туре	24µm Aluminium/polyester	24µm Aluminium/polyester foil >150% coverage	
	Drain wire	7 x 0.20mm (0.22mm²) AWG 24/7		
Jacket	Material	SHF-1 LSZH polymer Red Lilac RAL 4001		
	Average thickness	0.50mm		
	Overall diameter	3.90mm ±0.15		
Physical properties unaged				
Jacket (at 60°C)	Tensile strength	>9N/mm²		
	Elongation	>125%		
	Heat shock test	150 °C x 1 hour - no cracks		
Electrical characteristics				
Resistance	Conductor	Ohm/Km	<90	
	Shield		<70	
	Insulation	M Ohm/Km	>5000	
Capacitance	Core to core	pF/m	50 nominal	
	Core to shield		100 nominal	
Impedance		110 Ohms ±20%		
Test voltage		1000 Vdc x 1 minute OK		

## Super AES 1 pair cable 278-431-000

Pair specifications				
Conductor	Material	Bare ultra pure oxygen free copper wire		
	Stranding	7 x 0.25mm (0.34mm <sup>2</sup> ) AW	G 22/7	
Insulation	Material	Foam skin polyolefin		
	Diameter	1.75mm ±0.10		
	Colour coding	Red & Black		
Cabling	Туре	Twisted pair		
	Lay length	~25mm		
Screen	Туре	24µm Aluminium/polyester	foil >100% coverage	
	Drain wire	7 x 0.25mm (0.34mm²) AWG 22/7		
Overall jacket				
Overall jacket	Material	SHF-1 LSZH thermoplastic polymer		
	Colour	Red Lilac RAL 4001		
	Average thickness	See characteristics by stock code		
Bend radius		10 x overall diameter		
Physical properties unaged				
Jacket (at 60°C)	Tensile strength	>9N/mm <sup>2</sup>		
	Elongation	>125%		
	Heat shock test	150 °C x 1 hour - no cracks		
Halogen Emissions	0.30% Halogen acid gases according to IEC 60754-2			
Electrical characteristics				
Resistance	Conductor	Ohm/Km	<58.8	
	Insulation	M Ohm/Km	>5000	
Capacitance	Core to core	pF/m	40 nominal	
	Core to shield		80 nominal	
Impedance (1-3 MHz)		110 Ohms ±20%		
Attenuation at 3MHz		4.90 dB/100m		
Test voltage		500 Vdc x 1 minute OK		

# purple series

### Characteristics by stock code

Stock code	Overall diameter mm	Jacket thickness mm	Weight Kg/Km	Construction and lay up
			0 0	
278-431-070	4.50	0.50	Call	22AWG 1 pair, foil screened
278-401-000	3.90	0.50	30	1 pair, foil screened
278-414-070	9.20	1.00	100	Cotton fillers + 4 pairs, 100mm lay
278-418-070	12.20	1.20	200	Cotton fillers + 1 pair, 1st layer 7 pairs, 140mm lay

Maximum reel length 500 metres