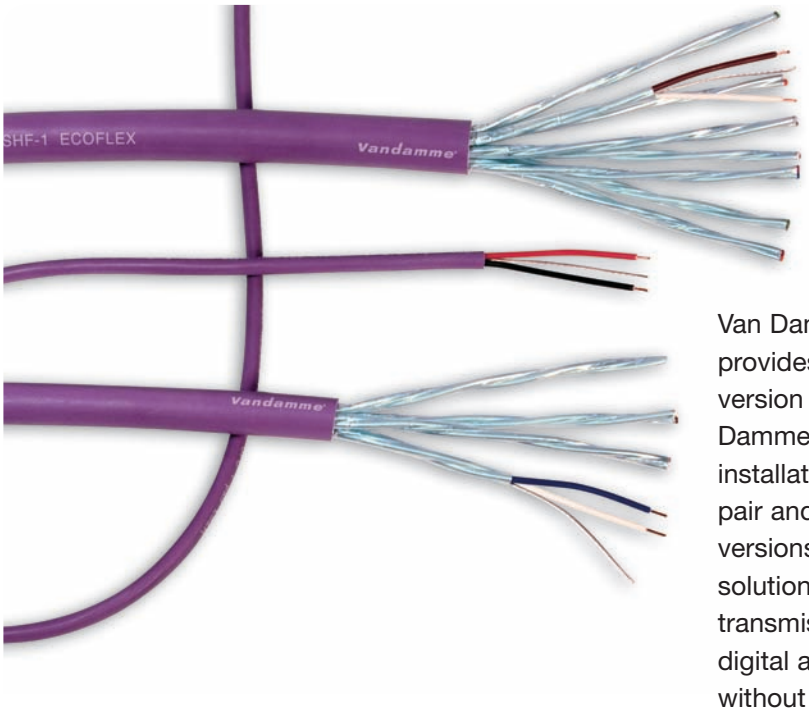
10 Super Purple Series Extended AES/Analogue installation cable LSZH





Van Damme Super Purple Series provides a Low Smoke Zero Halogen version of the established Van Damme Super Green Series for the installation market. Available as a 1 pair and 4 and 8 pair multicore versions this cable range provides a solution for the extended distance transmission of 96 KHz AES/EBU digital audio – over 150 metres without active equalisation. It is also suitable for long analogue audio runs and any critical balanced data signal that requires low capacitance.

Applications

- Long distance transmission of AES/EBU digital audio signals and analogue balanced audio for installation
- Installation in public buildings, schools and colleges, government premises and marine vessels
- Equipment rack wiring where LSZH materials have been specified
- Any 100 to 110 Ohm balanced data application such as RS422, RS485 and DMX512

Application notes

- 22AWG conductors for low capacitance and excellent attenuation figures
- Multicore types are foil screened pairs with polyester overwrap to keep the overall diameter to a minimum – pairs should be sleeved with PVC or heatshrink sleeving when broken out for termination
- Electrically engineered for long distance 96KHz digital audio transmission –150 metres without equalisation is well within the cables limitations
- Jacket material specified as the thermoplastic polymer SHF1; 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

1 pair 278-431-000 and multicore elements

Pair specifications

Conductor	Material	Bare ultra pure oxygen free copper wire	
	Stranding	7 x 0.25mm (0.34mm²) AWG 22/7	
Insulation	Material	Foam skin polyolefin	
	Diameter	1.75mm ±0.10	
	Colour coding	Red & Black	
Cabling	Type	Twisted pair	
	Lay length	~25mm	
Screen	Type	24µm Aluminium/polyester foil >100% coverage	
	Drain wire	7 x 0.25mm (0.34mm²) AWG 22/7	
Pair overwrap	Multicore only	Polyester clear tape overwrapping	

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/mm²	
	Elongation	>125%	
	Heat shock test	150 °C x 1 hour - no cracks	
Halogen Emissions	≤0.30% Halogen acid gasses according to IEC 60754-2		

Electrical characteristics

Resistance	Conductor	Ohm/Km	<144
	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 3 MHz		4.90 dB/100m	
Test voltage		500 Vdc x 1 minute OK	

Characteristics

Stock code	Description	Overall diameter mm	Jacket thickness mm	Weight Kg/Km
278-431-000	Van Damme Super Purple Series 1 pair	4.50	0.50	25.60
278-434-070	Van Damme Super Purple Series 4 pair	11.10	1.00	114
278-438-070	Van Damme Super Purple Series 8 pair	14.40	1.00	201

• Maximum reel length 500 metres