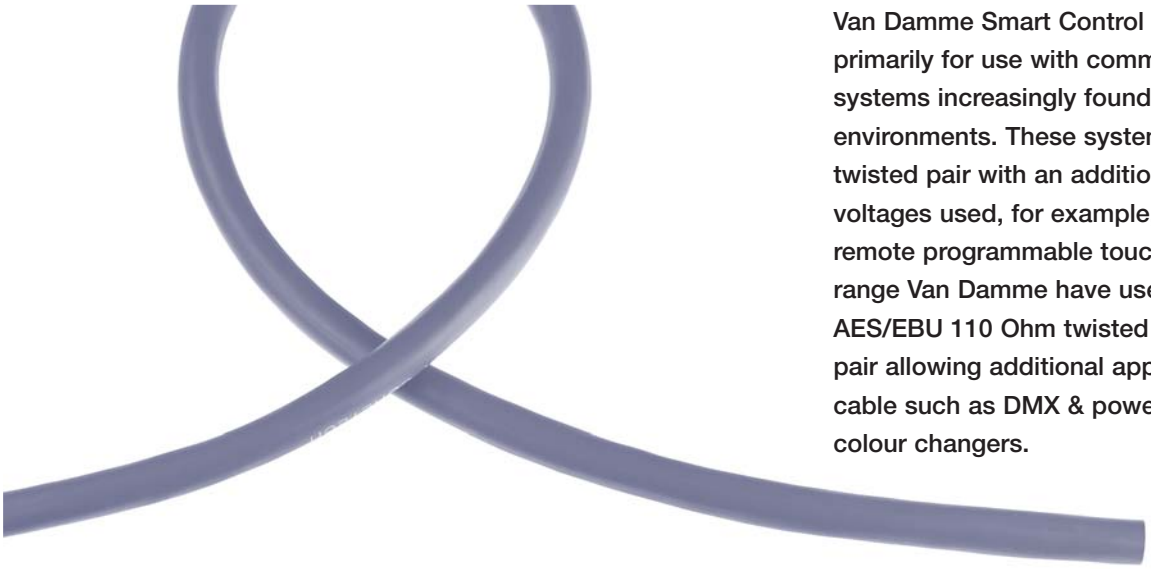
cable

Smart Control series



Van Damme Smart Control cables are primarily for use with common automation systems increasingly found in home and office environments. These systems run a screened twisted pair with an additional 2 wires for DC voltages used, for example, for powering remote programmable touch panels. For this range Van Damme have used a 22AWG AES/EBU 110 Ohm twisted pair as the data pair allowing additional applications for the cable such as DMX & power for lighting colour changers.

Applications

- Control cabling for home automation systems
- DMX and power cables – e.g. for lighting colour changers

Application notes

- 110 Ohm AES/EBU pair will also carry digital and analogue audio, DMX, timecode and midi signals
- Available with a PVC jacket for flexible use or a LSZH jacket for installation
- LSZH 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
- LSZH version 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

data/control series

Twisted Pair specification			
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	2.00mm ±0.10	
	Colour coding	Red & Black	
Cabling	Type	Twisted pair	
	Lay length	~25mm	
Screen	Type	24µm Aluminium/polyester foil >100% coverage	
	Drain wire	19 x 0.16 (0.14mm²) AWG 24/19	
Separator	Material	Polyester tape	
DC power conductors			
Conductor	Material	Bare ultra pure oxygen free copper wire	
	Stranding	1.00mm² AWG 17	
Insulation	Material (PVC type)	PVC	
	Material (LSZH type)	SHF-1 LSZH thermoplastic polymer	
	Diameter	2.15mm ±0.10	
	Colour coding	Brown & Blue	
Overall jacket			
Overall Jacket	Material (PVC type)	Flexible PVC composite	
	Material (PVC type)	SHF-1 LSZH thermoplastic polymer	
	Colour	Pearl Blackberry RAL 4012	
	Overall diameter	7.50mm	
Bend radius		15 x overall diameter	
Physical properties unaged			
		PVC type	LSZH type
Jacket (at 60°C)	Tensile strength	>12.5N/mm²	9N/mm²
	Elongation	>100%	> 125%
	Heat shock test	150 °C x 1 hour - no cracks	150°C x 1 hour / No cracks
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 (1-4 MHz)		110 Ohms ±20%	
Attenuation at 3MHz		4.90 dB/100m	
Test voltage		500 Vdc x 1 minute OK	

• Maximum reel length 500 metres