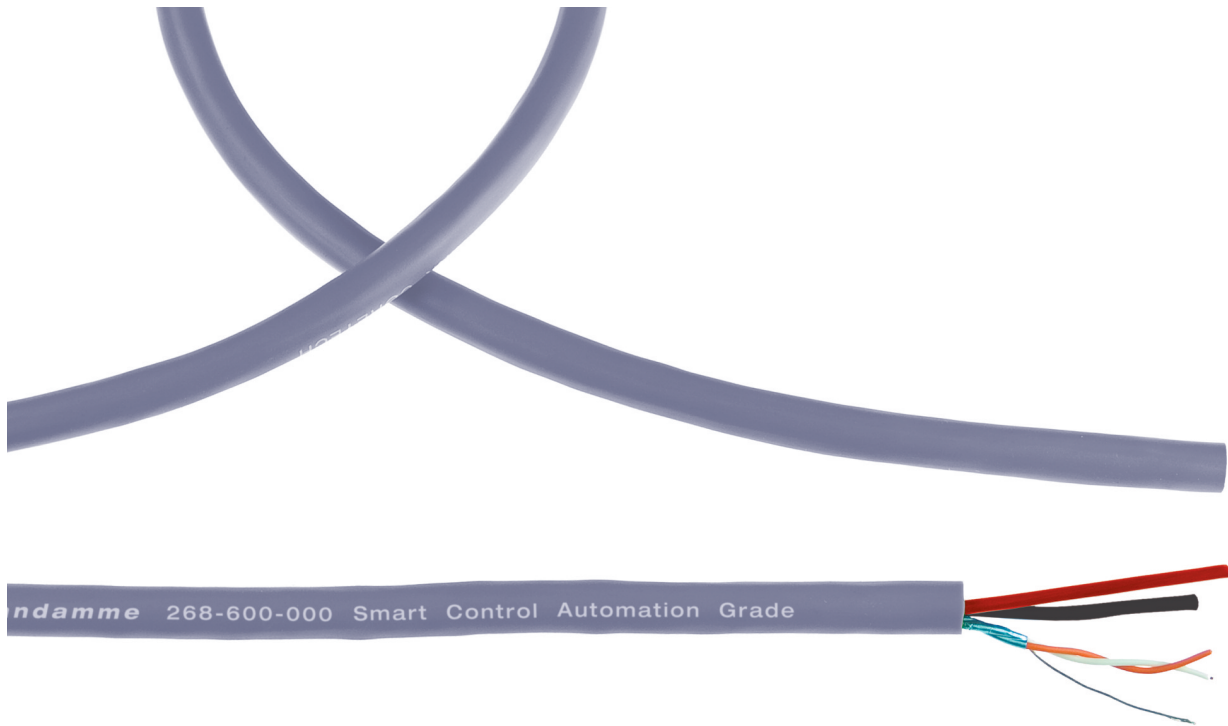




data/control series

Smart Control & DMX 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 SHF1; 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
- 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 60134.2 Measurement of smoke density



data/control series

Twisted Pair specification

Conductor	Material	Bare ultra pure oxygen free copper wire
	Stranding	7 x 0.25mm (0.34mm ²) AWG 22/7
Insulation	Material	Foam skin polyolefin
	Diameter	2.00mm ±0.10
Cabling	Colour coding	Red & Black
	Type	Twisted pair
	Lay length	~25mm
Screen	Type	24µm Aluminium/polyester foil >100% coverage
	Drain wire	19 x 0.16 (0.14mm ²) AWG 24/19
Separator	Material	Polyester tape

DC power conductors

Conductor	Material	Bare ultra pure oxygen free copper wire
	Stranding	1.00mm ² AWG 17
Insulation	Material (PVC type)	PVC
	Material (LSZH type)	SHF1 LSZH thermoplastic polymer
	Diameter	2.15mm ±0.10
	Colour coding	Brown & Blue

Overall Jacket

Overall Jacket	Material (PVC type)	Flexible PVC composite
	Material (LSZH type)	SHF1 LSZH thermoplastic polymer
	Colour	Pearl Blackberry RAL 4012
	Overall diameter	7.50mm
Bend radius		15 x overall diameter

Physical properties unaged

Jacket (at 60°C)	PVC type		LSZH type	
	Tensile strength	>12.5N/mm ²	9N/mm ²	
	Elongation	>100%	> 125%	
	Heat shock test	150 °C x 1 hour - no cracks	150°C x 1 hour / No cracks	

Electrical characteristics (pair)

Resistance	Conductor	Ohm/km	<58.8
	Insulation	MOhm/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

Stock code

Description

268-600-000	Van Damme Smart Control signal/DC power PVC
278-600-000	Van Damme Smart Control signal/DC power LSZH

Maximum reel length 500 metres

Van Damme Smart Control DMX512 Lighting Control Cable - One pair (268-610-000) and two pair (268-620-000) PVC jacketed control cables suitable for all DMX512 lighting control applications.



Specification	268-610-000	268-620-000
Pair Conductors	16x0.20mm (AWG21 0.50 mm ²) stranded tinned copper	16x0.20mm (AWG21 0.50 mm ²) stranded tinned copper
Insulation	Foamed Polythene OD 1.80mm ± 0.10mm	Foamed Polythene OD 1.80mm ± 0.10mm
Pair Colours	Red/Blue	Red/Blue & Green/White
Cabling	2 cores twisted together with fillers, polyester wrapping	2 pairs of 2 cores twisted together with fillers, polyester wrapping
Screen	Lapped Aluminium / Mylar foil 100% coverage	Lapped Aluminium / Mylar foil 100% coverage
Drain Wire	16x0.20mm (AWG21 0.50 mm ²) stranded tinned copper	16x0.20mm (AWG21 0.50 mm ²) stranded tinned copper
Nominal O. D	6.00mm ± 0.20mm	8.30mm ± 0.20mm
Sheath	Special PVC composite matt black RAL 9005	Special PVC composite matt black RAL 9005
Weight	36 Kg/Km	84 Kg/Km
Max. reel length	500m	500m
Test Voltage	1000V 50Hz 1 minute	1000V 50Hz 1 minute
Insulation Resistance	20 MOhm/km at 20°C	20 MOhm/km at 20°C
Conductor Resistance	40.1 Ohms/km at 20°C	40.1 Ohms/km at 20°C
Max. operating voltage	30V	30V
Temperature rating	-30°C to +80°C installed	-30°C to +80°C installed