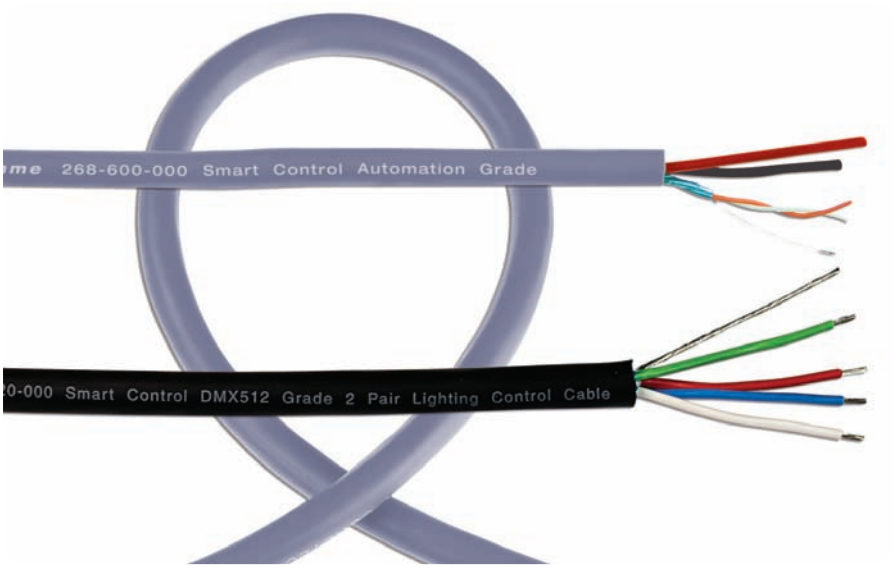
41 Smart Control series





The Van Damme Smart Control Range comprises a PVC or LSZH jacketed home automation control cable and 1 and 2 pair DMX control cables. Van Damme Smart Control home automation 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. Van Damme DMX512 Cables are robust, tour grade PVC jacketed precision foil screened cables for the transmission of the DMX lighting control protocol.

Applications

Smart Control automation cable

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

DMX Cable

- 1 and 2 pair DMX512 for lighting control

Application notes

Smart Control automation cable

- 110 Ohm AES/EBU pair will also carry digital and analogue audio, DMX, timecode and midi signals
- Available with 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
- 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

DMX Cable

- 22AWG conductors for optimum data transfer
- Flexible yet robust PVC jacket for reliable tactical use

data/control series

Smart Control automation cable

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 specification

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	Material (PVC type)	PVC
	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

Jacket (at 60°C)	Tensile strength	9N/mm²
	Elongation	> 125%
	Heat shock test	150°C x 1 hour / No cracks
Weight (Kg/km)	268-600-000: 70.5	278-600-000: 71

Electrical characteristics

Resistance	Conductor	<58.8 Ohm/Km
	Insulation	>5000 M Ohm/Km
Capacitance	Core to core	40pF/m nominal
	Core to shield	80pF/m nominal
Impedance (1-4 MHz)		110 Ohms ±20%
Attenuation at 3MHz		4.90 dB/100m
Test voltage		500 Vdc x 1 minute OK

DMX cable

Mechanical Specification	1 pair 268-610-000	2 pair 268-620-000
Pair Conductors	16 x 0.20mm (0.50mm²) AWG21 tinned oxygen free copper	16 x 0.20mm (0.50mm²) AWG21 tinned oxygen free copper
Insulation	Foamed polyethylene O.D. 1.80mm	Foamed polyethylene O.D. 1.80mm
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	Lapped Aluminium/Mylar foil
Separator	16 x 0.20mm (0.50mm²) AWG21 tinned oxygen free copper	16 x 0.20mm (0.50mm²) AWG21 tinned oxygen free copper
Overall diameter	6.00mm ± 0.20mm	8.30mm ± 0.20mm
Overall jacket	Special PVC composite matt black RAL9005	Special PVC composite matt black RAL9005
Bend Radius	10 x Overall Diameter	
Weight	268-610-000 49 Kg/km	268-620-000 55 Kg/km

Electrical characteristics

Test voltage	1000 Vdc x 1 minute
Insulation resistance	20 MOhm/km at 20°C
Conductor resistance	40.1 Ohm/km at 20°C
Temperature rating	-30 to +80°C installed

Description

Stock code	Description	Reel length
268-600-000	Van Damme Smart Control Signal/DC power automation cable PVC	500m
278-600-000	Van Damme Smart Control Signal/DC power automation cable LSZH	500m
268-610-000	Van Damme Smart Control DMX 1 pair	500m
268-620-000	Van Damme Smart Control DMX 2 pair	500m