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**VAN DAMME 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.

| KEY BENEFITS                 |                        |                                  | MATERIALS          |               |                        | APPLICATIONS      |                      |                      |
|------------------------------|------------------------|----------------------------------|--------------------|---------------|------------------------|-------------------|----------------------|----------------------|
|                              |                        |                                  |                    |               |                        |                   |                      |                      |
| Digital and Analogue signals | Low Smoke Zero Halogen | Characteristic 110 Ohm impedance | Oxygen Free Copper | SHF-1 Polymer | Foam skin polyethylene | Recording Studios | Schools and Colleges | Marine Installations |

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### Applications

- Installed AES/EBU digital or analogue audio cable infrastructure requiring LSZH construction
- 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 - 24 pairs
- Multicore types have 26AWG conductors for a reduced overall diameter
- Jacket material specified as the thermoplastic polymer SHF-1; compliant with IEC 60092-360:2014 Electrical Installations in ships - 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
- Ultra-pure oxygen free copper for outstanding sonic integrity

### Mechanical Specification

#### Multicores

##### Pairs

|                     |  |
|---------------------|--|
| Conductor           | 7 x 0.16 mm bare ultra-pure oxygen-free copper   |
| Conductor size      | 7 x 0.16 mm, 0.14 mm <sup>2</sup> , AWG 26/7     |
| Insulation          | Foam skin polyethylene, Red/Blue                 |
| Insulation diameter | 1.10 ± 0.10 mm                                   |
| Drain wire          | 7 x 0.16 mm tinned ultra-pure oxygen-free copper |
| Drain wire size     | 7 x 0.16 mm, 0.14 mm <sup>2</sup> , AWG 26/7     |
| Screen              | 24 µm Aluminium/Polyester Foil > 150% coverage   |
| Jacket material     | SHF-1 LSZH Polymer                               |
| Overall diameter    | 2.90 ± 0.15 mm                                   |
| Colour              | Red Lilac, RAL 4001                              |

##### Overall Construction

|                       |                                   |
|-----------------------|-----------------------------------|
| Separator             | Soft textile tape > 125% coverage |
| Jacket material       | SHF-1 LSZH Polymer                |
| Colour                | Red Lilac, RAL 4001               |
| Bend radius           | 15 x overall diameter             |
| Operating temperature | -35 to +70 °C                     |

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### 1 Pair

|                       |  |
|-----------------------|--|
| Conductor             | 7 x 0.20 mm bare ultra-pure oxygen-free copper   |
| Conductor size        | 7 x 0.20 mm, 0.22 mm <sup>2</sup> , AWG 24/7     |
| Insulation            | Foam skin polyethylene, Red/Black                |
| Insulation diameter   | 1.40 ± 0.10 mm                                   |
| Drain wire            | 7 x 0.20 mm tinned ultra-pure oxygen-free copper |
| Drain wire size       | 7 x 0.20 mm, 0.22 mm <sup>2</sup> , AWG 24/7     |
| Screen                | 24 µm Aluminium/Polyester Foil > 150% coverage   |
| Jacket material       | SHF-1 LSZH Polymer                               |
| Overall diameter      | 3.90 ± 0.15 mm                                   |
| Colour                | Red Lilac, RAL 4001                              |
| Bend radius           | 15 x overall diameter                            |
| Operating temperature | -35 to +70 °C                                    |

### Electrical Specification

#### Multicores

|             |                |                |
|-------------|----------------|----------------|
| Resistance  | Conductor      | < 144 Ohm/km   |
|             | Insulation     | > 5000 MOhm/km |
| Capacitance | Core to core   | 50 pF/m        |
|             | Core to screen | 100 pF/m       |
| Impedance   | 1 -4 MHz       | 110 ± 20% Ohms |
| Attenuation | 3 MHz          | 7.05 dB/100 m  |

### 1 Pair

|             |                |                |
|-------------|----------------|----------------|
| Resistance  | Conductor      | < 90 Ohm/km    |
|             | Insulation     | > 5000 MOhm/km |
| Capacitance | Core to core   | 40 pF/m        |
|             | Core to screen | 80 pF/m        |
| Impedance   | 1 -4 MHz       | 110 ± 20% Ohms |

### Part Numbers and Description

| Part Number | Description  | Overall Diameter | Max. Reel Length |
|-------------|--|------------------|------------------|
| 278-412-070 | Van Damme Purple Series Digilog LSZH 2 pair multicore  | 7.50 mm          | 500 m            |
| 278-414-070 | Van Damme Purple Series Digilog LSZH 4 pair multicore  | 9.20 mm          | 500 m            |
| 278-418-070 | Van Damme Purple Series Digilog LSZH 8 pair multicore  | 12.20 mm         | 500 m            |
| 278-422-070 | Van Damme Purple Series Digilog LSZH 12 pair multicore | 15.00 mm         | 500 m            |
| 278-424-070 | Van Damme Purple Series Digilog LSZH 24 pair multicore | 20.00 mm         | 500 m            |
| 278-401-000 | Van Damme Purple Series Digilog LSZH 1 pair            | 3.90 mm          | 500 m            |



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### Standards and Compliance

|                    |  |
|--------------------|--|
| RoHS 2011/65/EU    | Restriction of Hazardous Substances  |
| REACH              | Registration, Evaluation, Authorisation and Restriction of Chemicals                                 |
| IEC 60092-360:2014 | Electrical Installations in ships - Sheathing materials for shipboard power and communication cables |
| 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   |