



### HD-SDI - digital video cable V16/72H - 1.6/7.2 AF - FRNC Eca

- very low attenuation
- double shielding (100% foil + 90% braid)
- flame retardant and non corrosive (FRNC)
- not suitable for mobile HD-SDI use
- CPR class Eca acc. to EN50575

PVC

UHD

6GSDI

Eca

The V16/72 is a cable designed for outstanding ultra-low-loss transmission in installations with extremely long transmission distances. Its solid copper core with diameter of 1.63 millimetres features ultra-low signal attenuation. Typical transmission distances under SMPTE standards are 590 metres for SDI video signals, 160 metres for 1.5-Gb/s HD-SDI signals and 116 metres for 3 Gb/s signals. However, in practice longer distances may well be possible depending on the devices used. The core is enclosed in a physically foamed PE dielectric medium that ensures signal transmission with low return loss and ultra-low attenuation. Effective protection against electromagnetic interference is offered by double shielding comprising an AL double composite layer and an ultra-densely woven copper shield providing over 95 per cent screening. The V16/72 is available with a choice of two jacket materials: durable PVC or flame-retardant halogen-free FRNC for installations.

#### construction

|                  |                                      |
|------------------|--------------------------------------|
| inner conductor  | solid bare copper wire, Ø 1.63 mm    |
| insulation       | Foam-Skin PE, gas injected, Ø 7.2 mm |
| 1. shield        | AL/PET/AL double-layer foil          |
| 2. shield        | tinned copper braid, >95% coverage   |
| overall diameter | 10.2 mm                              |

#### mechanics

|                     |               |
|---------------------|---------------|
| working temperature | -30°C / +70°C |
|---------------------|---------------|

#### electric

|                          |           |
|--------------------------|-----------|
| characteristic impedance | 75 Ω ± 2% |
| capacity                 | 53 pF/m   |
| velocity of propagation  | 84 %      |
| DC resistance            |           |
| inner conductor          | 8.6 Ω/km  |
| outer conductor          | 4.9 Ω/km  |
| screening attenuation    | > 95 dB   |
| attenuation [dB/100m]    |           |
| 1 MHz                    | 0.5       |
| 5 MHz                    | 1.0       |
| 10 MHz                   | 1.4       |
| 100 MHz                  | 3.9       |
| 200 MHz                  | 5.5       |
| 270 MHz                  | 6.7       |
| 360 MHz                  | 7.8       |
| 500 MHz                  | 9.3       |
| 1000 MHz                 | 13.6      |
| 1500 MHz                 | 17.1      |
| return loss              |           |
| 30 - 300 MHz             | > 30 dB   |
| 300 - 600 MHz            | > 26 dB   |
| 600 - 900 MHz            | > 24 dB   |

| order code | outer jacket | working temperature | min. bending radius<br>mm | colour | weight<br>kg/m | standard lengths<br>m |
|------------|--------------|---------------------|---------------------------|--------|----------------|-----------------------|
| VD167SH-E  | FRNC         | -30°C / +70°C       | 60                        | green  | 0.12           | 100 / 200 / 300 / 500 |

technical specifications are subject to change