| hulk oob | | video | digital video | | | | | | |
|--|--------------------------------------|--|---|--|-----------|--|--|--|--|
| bulk cab | ies | viueo | 75 Ω | | VD167SH-E | | | | |
| KOTZ VD167SH-E HD-SDI - digital video cable 1.6/7.2 AF - FRNC - Eca • very low attenuation • double shielding (100% foil + 95% braid) • not suitable for mobile HD-SDI use • flame retardant and non corrosive (FRNC) • CPR class Eca acc. to EN50575 | | | | | | | | | |
| 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. | | | | | | | | | |
| insulation 1. shield 2. shield | Foam-Skin PE, ga AL/PET/AL double | r wire, Ø 1.63mm s injected, Ø 7.2mm -layer foil iid, >95% coverage | electric characteristic impedance capacity velocity of propagation DC resistance inner conductor | 75 Ω ± 2% 53 pF/m 84 % 8.6 Ω/km | 6 | | | | |

mechanics

order code

VD167SH-E

working temperature

| solid bare copper wire, Ø 1.63 mm Foam-Skin PE, gas injected, Ø 7.2 mm ALVEFTAL double-layer foil tinned copper braid, >95% coverage 10.2 mm staracteristic impedance capacity 75 Ω ± 2% 53 pF/m 10.2 mm 84 % -30°C / +70°C 8.6 Ω/km -30°C / +70°C 8.6 Ω/km 100 HHz 95 d8 100 HHz 1.0 100 HHz 1.0 100 HHz 1.0 100 HHz 1.4 100 0 HHz 3.9 135 MHz 4.8 200 MHz 5.5 270 MHz 6.5 360 MHz 9.3 750 MHz 1.3 100 MHz 3.9 135 MHz 4.8 200 MHz 5.5 210 MHz 1.3 1000 MHz 1.3 1000 MHz 1.3 1000 MHz 2.4 6000 MHz 2.4 6000 MHz 2.4 6000 MHz 2.4 6000 MHz 2.1 800 Hz 2.2 1000 Hz 2.1 | | | | | | |
|--|--------------|------------------------|---------------------|------------------------------|----------|-----------------------|
| AL/PET/AL double-layer foil velocity of propagation 84 % tinned copper braid, >95% coverage DC resistance 10.2 mm inner conductor 8.6 G/km outer conductor 4.9 G/km screening attenuation >95 dB -30°C / +70°C 1 MHz 0.5 5 MHz 1.0 10 MHz 1.4 100 MHz 3.9 135 MHz 4.8 200 MHz 5.5 270 MHz 6.5 360 MHz 7.8 500 MHz 9.3 750 MHz 11.3 1000 MHz 13.1 1500 MHz 13.1 1500 MHz 13.1 1500 MHz 13.1 1000 MHz 13.1 1500 MHz 13.1 1000 MHz 14.1 1000 MHz 15.4 3000 - 1500 MHz 25.8 300 - 300 MHz 22.4 6000 MHz 36.4 12000 MHz 23.8 3000 - 15000 MHz 21.8 3000 - 12000 MHz 21.8 3 | | | | characteristic impedance | | |
| tinned copper braid, >95% coverage 10.2 mm DC resistance inner conductor 8.6 G2/km outer conductor 95 dB nom. attenuation (dB/100m) 1 MHz 0.5 5 MHz 1.0 10 MHz 1.4 100 MHz 3.9 135 MHz 4.8 200 MHz 5.5 270 MHz 6.5 360 MHz 7.8 500 MHz 9.3 750 MHz 11.3 1000 MHz 13.1 1500 MHz 13.1 1500 MHz 13.1 1500 MHz 13.1 1500 MHz 13.4 1000 MHz 13.1 1500 MHz 14.4 100 MHz 15.5 270 MHz 1 | | | | capacity | | |
| 10.2 mm inner conductor 8.6 Ω/km outer conductor 4.9 Ω/km screening attenuation > 95 dB nom. attenuation 10/10 1 MHz 0.5 5 MHz 1.0 100 MHz 3.9 135 MHz 4.8 200 MHz 5.5 270 MHz 6.5 360 MHz 7.8 200 MHz 3.3 750 MHz 1.3 1000 MHz 3.3 750 MHz 1.3 1000 MHz 1.4 100 MHz 3.8 750 MHz 1.3 1000 MHz 13.1 1000 MHz 16.4 3000 MHz 36.4 12000 MHz 36.4 12000 MHz 36.4 12000 MHz 36.4 300 - 300 MHz >25 dB 300 - 300 MHz >25 dB 300 - 1000 MHz >21 dB 3000 - 12000 MHz >15 dB | | | | velocity of propagation 84 % | | |
| outer conductor screening attenuation nom. attenuation (dB/100m) > 95 dB -30°C / +70°C 1 MHz 0.5 1 MHz 1.0 10 MHz 1.4 100 MHz 3.9 135 MHz 4.8 200 MHz 5.5 200 MHz 5.5 360 MHz 7.8 500 MHz 9.3 300 MHz 1.3 1000 MHz 1.3 1000 MHz 1.3 1000 MHz 3.4 200 MHz 5.5 200 MHz 9.3 300 MHz 9.3 3000 MHz 3.4 12000 MHz 3.4 3000 MHz 2.5 300 - 1500 MHz 2.3 dB 1500 - 3000 MHz > 2.5 dB 300 - 1500 MHz > 2.3 dB 1500 - 3000 MHz > 2.1 dB 300 - 12000 MHz > 15 dB | tinned coppe | r braid, >95% coverage | DC r | esistance | | |
| -30°C / +70°C screening attenuation (dB/100m) 95 dB 1 MHz 0.5 5 MHz 1.0 10 MHz 1.4 100 MHz 3.9 335 MHz 4.8 200 MHz 5.5 270 MHz 6.5 300 MHz 7.8 500 MHz 7.8 500 MHz 9.3 750 MHz 11.3 1000 MHz 11.3 1000 MHz 16.4 3000 MHz 24.2 6000 MHz 36.4 12000 MHz 57.4 return loss 30 - 3000 MHz > 25 dB 300 - 1500 MHz > 21 dB 300 - 12000 MHz > 15 dB | 10.2 mm | | inne | r conductor | 8.6 Ω/km | |
| -30°C / +70°C 1 MHz 0.5 5 MHz 1.0 10 MHz 1.4 100 MHz 3.9 135 MHz 4.8 200 MHz 5.5 270 MHz 6.5 360 MHz 7.8 500 MHz 13.1 1500 MHz 13.1 1500 MHz 13.1 1500 MHz 16.4 3000 MHz 24.2 6000 MHz 36.4 12000 MHz 57.4 return loss 30 - 3000 MHz > 25 dB 300 - 1500 MHz > 23 dB 1500 - 3000 MHz > 21 dB 3000 - 12000 MHz > 15 dB | | | 0 | uter conductor | 4.9 Ω/km | |
| -30°C / + /0°C 1 MHz 0.5 5 MHz 1.0 10 MHz 1.4 100 MHz 3.9 135 MHz 4.8 200 MHz 5.5 270 MHz 6.5 360 MHz 7.8 500 MHz 9.3 750 MHz 11.3 1000 MHz 13.1 1500 MHz 16.4 3000 MHz 24.2 6000 MHz 36.4 12000 MHz 36.4 12000 MHz 36.4 12000 MHz 25 dB 300 - 1500 MHz > 25 dB 300 - 1500 MHz > 21 dB 3000 - 12000 MHz > 21 dB 3000 - 12000 MHz > 15 dB | | | scre | ening attenuation | > 95 dB | |
| autor of the second s | 2000 / .700 | | nom | . attenuation [dB/100m] | | |
| 10 MHz 1.4 100 MHz 3.9 135 MHz 4.8 200 MHz 5.5 270 MHz 6.5 360 MHz 7.8 500 MHz 9.3 750 MHz 11.3 1000 MHz 13.1 1500 MHz 16.4 3000 MHz 24.2 6000 MHz 36.4 12000 MHz 57.4 return loss 30 - 300 MHz > 25 dB 300 - 1500 MHz > 21 dB 3000 - 12000 MHz > 15 dB | -30 67 +70 | C | 1 | 1 MHz | | |
| 100 MHz 3.9 135 MHz 4.8 200 MHz 5.5 270 MHz 6.5 360 MHz 7.8 500 MHz 9.3 750 MHz 11.3 1000 MHz 13.1 1500 MHz 13.1 1500 MHz 16.4 3000 MHz 24.2 6000 MHz 36.4 12000 MHz 57.4 return loss 30 - 300 MHz > 25 dB 300 - 1500 MHz > 23 dB 1500 - 3000 MHz > 21 dB 3000 - 12000 MHz > 15 dB | | | 5 | MHz | 1.0 | |
| 135 MHz 4.8 200 MHz 5.5 270 MHz 6.5 360 MHz 7.8 500 MHz 11.3 1000 MHz 11.3 1000 MHz 13.1 1500 MHz 16.4 3000 MHz 24.2 6000 MHz 36.4 12000 MHz 57.4 return loss 30 - 300 MHz > 25 dB 300 - 1500 MHz > 23 dB 1500 - 3000 MHz > 21 dB 3000 - 12000 MHz > 15 dB | | | 1 | 0 MHz | 1.4 | |
| 200 MHz 5.5 270 MHz 6.5 360 MHz 7.8 500 MHz 9.3 750 MHz 11.3 1000 MHz 13.1 1500 MHz 16.4 3000 MHz 24.2 6000 MHz 36.4 12000 MHz 57.4 return loss 30 - 300 MHz > 25 dB 300 - 1500 MHz > 23 dB 1500 - 3000 MHz > 21 dB 3000 - 12000 MHz > 15 dB | | | 1 | 00 MHz | 3.9 | |
| 270 MHz 6.5 360 MHz 7.8 500 MHz 9.3 750 MHz 11.3 1000 MHz 13.1 1500 MHz 16.4 3000 MHz 36.4 12000 MHz 57.4 return loss 30 - 300 MHz > 25 dB 300 - 1500 MHz > 23 dB 1500 - 3000 MHz > 21 dB 3000 - 12000 MHz > 15 dB | | | 1 | 35 MHz | 4.8 | |
| 360 MHz 7.8 500 MHz 9.3 750 MHz 11.3 1000 MHz 13.1 1500 MHz 16.4 3000 MHz 24.2 6000 MHz 36.4 12000 MHz 57.4 return loss 30 - 300 MHz > 25 dB 300 - 1500 MHz > 23 dB 1500 - 3000 MHz > 21 dB 3000 - 12000 MHz > 15 dB | | | 2 | 00 MHz | 5.5 | |
| 500 MHz 9.3 750 MHz 11.3 1000 MHz 13.1 1500 MHz 16.4 3000 MHz 24.2 6000 MHz 36.4 12000 MHz 57.4 return loss 30 - 300 MHz > 25 dB 300 - 1500 MHz > 23 dB 1500 - 3000 MHz > 21 dB 300 - 12000 MHz > 15 dB | | | 2 | 70 MHz | 6.5 | |
| 750 MHz 11.3 1000 MHz 13.1 1500 MHz 16.4 3000 MHz 24.2 6000 MHz 36.4 12000 MHz 57.4 return loss 30 - 300 MHz > 25 dB 300 - 1500 MHz > 23 dB 1500 - 3000 MHz > 21 dB 300 - 12000 MHz > 15 dB | | | 3 | 60 MHz | 7.8 | |
| 1000 MHz 13.1 1500 MHz 16.4 3000 MHz 24.2 6000 MHz 36.4 12000 MHz 57.4 return loss 30 - 300 MHz > 25 dB 300 - 1500 MHz > 23 dB 1500 - 3000 MHz > 21 dB 3000 - 12000 MHz > 15 dB | | | 5 | | | |
| 1500 MHz 16.4 3000 MHz 24.2 6000 MHz 36.4 12000 MHz 57.4 return loss 30 - 300 MHz > 25 dB 300 - 1500 MHz > 23 dB 1500 - 3000 MHz > 21 dB 3000 - 12000 MHz > 15 dB | | | 7 | | | |
| 3000 MHz 24.2 6000 MHz 36.4 12000 MHz 57.4 return loss 30 - 300 MHz > 25 dB 300 - 1500 MHz > 23 dB 1500 - 3000 MHz > 21 dB 3000 - 12000 MHz > 15 dB outer jacket working temperature min. bending radius mm cable color weight kg/m standard lengths m | | | 1 | 000 MHz | 13.1 | |
| 6000 MHz 36.4 12000 MHz 57.4 return loss 30 - 300 MHz > 25 dB 300 - 1500 MHz > 23 dB 1500 - 3000 MHz > 21 dB 300 - 12000 MHz > 21 dB 300 - 12000 MHz > 15 dB | | | 1 | 3000 MHz 6000 MHz | | |
| 12000 MHz 57.4 return loss 30 - 300 MHz > 25 dB 300 - 1500 MHz > 23 dB 1500 - 1500 MHz > 23 dB 1500 - 3000 MHz > 21 dB 300 - 12000 MHz > 15 dB outer jacket working temperature min. bending radius mm cable color weight kg/m standard lengths m | | | 3 | | | |
| return loss 30 - 300 MHz > 25 dB 300 - 1500 MHz > 23 dB 300 - 1500 MHz > 23 dB 1500 - 3000 MHz > 21 dB 3000 - 12000 MHz > 21 dB 3000 - 12000 MHz > 15 dB | | | 6 | | | |
| 30 - 300 MHz > 25 dB 300 - 1500 MHz > 23 dB 1500 - 3000 MHz > 21 dB 3000 - 12000 MHz > 21 dB 3000 - 12000 MHz > 15 dB | | | 1 | | | |
| 300 - 1500 MHz > 23 dB 1500 - 3000 MHz > 21 dB 3000 - 12000 MHz > 15 dB outer jacket working temperature min. bending radius cable color weight standard lengths mm m | | | retu | rn loss | | |
| outer jacket working temperature min. bending radius mm cable color weight kg/m standard lengths m | | | 3 | | | |
| outer jacket working temperature min. bending radius mm cable color weight kg/m standard lengths m | | | 3 | | | |
| outer jacket working temperature min. bending radius cable color weight standard lengths mm kg/m m | | | 1 | 500 - 3000 MHz | > 21 dB | |
| mm kg/m m | | | 3 | 000 - 12000 MHz | > 15 dB | |
| mm kg/m m | outer jacket | working temperature | min. bending radius | cable color | weight | standard lengths |
| FRNC -30°C / +70°C 60 green 0.12 100 / 200 / 300 / 500 | · | | - | | | m |
| | FRNC | -30°C / +70°C | 60 | green | 0.12 | 100 / 200 / 300 / 500 |

technical specifications are subject to change

