



cable

Red Series Plasma Grade Ecoflex LSZH miniature video multicore



This range features Low Smoke Zero Halogen (LSZH) jacketed versions of the 2 and 5 way Red Series Miniature Video multicore. Mechanically and electrically identical, the use of LSZH materials makes them suitable for installations in public buildings and other situations where LSZH is specified.

Applications

- Multicore video signal transmissions - SVHS (YC), YUV, RGBS and RGBHV (VGA) in an installation environment
- Installation in public buildings, schools and colleges, government premises and marine vessels

Application notes

- 30 metre recommended maximum length for analogue video
- Longer run lengths achievable using appropriate distribution amplifiers (DAs)
- Multicores are industry standard colour coded
- All cables use RG179 type connectors and small BNC boots
- 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
- Fully tested and compliant with the following IEC standards (see glossary for full description)
 - IEC 60332.1 Fire resistance 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
- Ultra pure oxygen free copper for outstanding sonic integrity



Mechanical Specifications - Individual Cores

| | | |
|-----------------------|-------------------|---|
| Conductor | Material | Tinned oxygen free copper |
| | Stranding | 7x 0.12mm (0.08mm ²) AWG 30/7 |
| Dielectric | Material | Foam skin Polyethylene |
| | Average thickness | 0.60 mm |
| | Diameter | 1.60mm ±0.05 |
| Screen | Material | Tinned oxygen free braided copper wire |
| | Coverage | 95% |
| | Dimension | 16x5x0.10mm |
| Overall Jacket | Material | SHF-1 LSZH thermoplastic polymer |
| | Average thickness | 0.30 mm |
| | Overall diameter | 2.60 ±0.10 mm |

LSZH ecoflex red series

Mechanical Specifications - Tracer wire (5 way only)

| | | |
|-------------------|-------------------|---|
| Conductor | Material | Tinned oxygen free copper |
| | Stranding | 7x 0.20mm (0.22mm ²) AWG 24/7 |
| Dielectric | Material | SHF-1 LSZH thermoplastic polymer |
| | Average thickness | 0.26mm |
| | Diameter | 1.10mm |
| Colour | Orange | |

Mechanical Specifications - Multicores

| | | |
|-------------------------|--------------------------------------|--------------------------------|
| | 2-way | 5-way |
| Stock Code | 278-302-020 | 278-305-020 |
| Coax Colours | White, Yellow | Red, Green, Blue, Black, White |
| Material | SHF-1 LSZH polymer Ruby Red RAL 3003 | |
| Thickness (ave) | 0.90 mm | 1.00 mm |
| Overall diameter | 7.30 mm | 9.60 mm |
| Bend radius | 15 x overall diameter | |
| Weight | 94 Kg/Km | 119 Kg/Km |

Physical properties unaged

| | | |
|------------------------|------------------|----------------------------|
| Jacket (@ 60°C) | Tensile strength | 9N/mm ² |
| | Elongation | > 125% |
| | Heat Shock Test | 150°C x 1 hour / No cracks |

Electrical Specifications

| | | |
|--------------------------------|----------------------|-----------------|
| Resistance | Conductor | 225 Ohm/Km |
| | Shield | 32 Ohm/Km |
| | Insulation | > 5000 M Ohm/Km |
| Voltage test | 1000V DC 1 minute OK | |
| Capacitance | 56.5 pF/m | |
| Velocity of propagation | 78% | |
| Impedance at 10MHz | 75 Ohms ±2 | |
| Attenuation | 5 MHz | 4.91 dB/100m |
| | 10 MHz | 6.99 dB/100m |
| | 50 MHz | 15.77 dB/100m |
| | 100 MHz | 22.74 dB/100m |
| | 135 MHz | 26.64 dB/100m |
| | 180 MHz | 30.99 dB/100m |

Structural return loss

