

Application

This cable is a multi-way flexible cable made up of miniature coaxial cables and is suitable for the interconnection of telecommunication transmission equipment.

Product Description & Construction

The cable consists of 8 or 16 miniature 75 Ohm coaxial cables. Each individual miniature coaxial cable consists of a plain annealed copper inner conductor coated with a solid polyethylene dielectric Type 03 to BS6234, surrounded by two layers of braided copper wires and sheathed with polyvinyl chloride, Type TM1 to BS7655. The miniature coaxial cables are stranded around a PVC dummy center the cable is sheathed overall with polyvinyl chloride, Type TM1 to BS7655. Low Smoke Zero Halogen option is also available.

Dimensions of Multi-way Coaxial Cable

| Number of Coaxial Elements in Cable | Diameter of PVC Dummy Center (mm) | Minimum Sheath Thickness (mm) | Maximum Overall Diameter (mm) | Minimum Bending Diameter (mm) |
|-------------------------------------|-----------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 8 | 6.25 | 1.1 | 16.5 | 82.5 |
| 16 | 2.20 | 1.1 | 21.5 | 107.5 |

Dimensions of Single Miniature Coaxial Cable

| Inner Conductor Diameter (mm) | Nominal Dielectric Diameter (mm) | Screen Layer 1 (mm) | Coverage (%) | Screen Layer 2 (mm) | Coverage (%) | Nominal Overall Diameter (mm) |
|-------------------------------|----------------------------------|---------------------|--------------|---------------------|--------------|-------------------------------|
| 0.31 | 1.95 | 2.40 | 91 | 2.85 | 90 | 3.55 |

Electrical Characteristics - General

| Impedance | Resistance of Inner Conductor | Nominal Capacitance | Attenuation | Dielectric Withstand | Insulation Resistance |
|--------------------|-------------------------------|---------------------|------------------------------|-----------------------------|---|
| Ω @ 5MHz | Ω per 100m | pF/m @ 1kHz | dB/100m maximum @ 5MHz | kV for 1 minute | M Ω /km Minimum after 1 minute |
| 75.0 \pm 4.0 | 23.6 | 67 | 4.8 | 3.5 (RMS) or 5.3 (DC) | 20,000 |

Electrical Characteristics - Far-End Signal to Crosstalk Ratio

| Frequency (MHz) | FESXTR Minimum |
|-----------------|----------------|
| 0.01 | 55 |
| 0.30 | 80 |
| 1.00 | 110 |
| 2.00 | 115 |
| 17.00 | 115 |