

PRODUCT SPECIFICATION

Hanqin Radiating Coaxial Cable

HQ 50D-12

PRODUCT DESCRIPTION

- The cable is used as a distributed antenna to provide communications in tunnels, subway, mines, large building complexes, and any other application in confined areas.
- Slots in the copper outer conductor allow a controlled portion of the internal RF energy to be radiated into the surrounding environment and can be designed individually.
- With the broadband capability of 75~3000MHz, this cable is used for both one-way and two-way communication systems, and a single radiating cable can handle multiple communication systems simultaneously.



CONSTRUCTION

| | | |
|-----------------|---|-----------|
| Inner conductor | Copper clad aluminum wire | Φ 4.80mm |
| Insulation | Physically foamed PE | Φ 12.20mm |
| Outer conductor | Corrugated copper tube with double row milled slots | Φ 13.80mm |
| Jacket | Non-halogenated, fire retardant PE | Φ 15.80mm |

MECHANICAL PROPERTIES

| | | |
|------------------------|----|------|
| Minimum bending radius | mm | 80 |
| Tensile force | N | 1130 |

ELECTRICAL PROPERTIES

| | | |
|-----------------------|-------|--------|
| Impedance | Ω | 50±2 |
| Capacitance | pF/m | 75 |
| Propagation velocity | % | 88 |
| DC breakdown voltage | kV | 6 |
| Insulation resistance | MΩ•km | >10000 |

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TRANSMISSION PROPERTIES

| Frequency MHz | Nom. attenuation @20 °C, dB/100m | Coupling loss(50%/95%) @20 °C, dB |
|------------------|-------------------------------------|--------------------------------------|
| 150 | 3.21 | 57 / 69 |
| 450 | 5.80 | 66 / 78 |
| 900 | 8.60 | 66 / 78 |
| 1800 | 13.50 | 67 / 79 |
| 1900 | 13.90 | 70 / 82 |
| 2200 | 14.70 | 78 / 90 |
| 2400 | 15.50 | 83 / 95 |

Attenuation & Coupling loss test method : IEC 61196-4.

VSWR

Tested in customers' operating band ≤1.3

ENVIRONMENTAL PROPERTIES

| | | |
|--------------------------------------|----|---------|
| Recommended storage temperature | °C | -70~+85 |
| Recommended installation temperature | °C | -25~+60 |
| Recommended operating temperature | °C | -40~+85 |