


# QR500M Messenger Aluminum Tube Cable

75Ω physically foamed argon-arc welded aluminum tube cable per GY/T135-1998, for CATV and video transmission.

| IMPEDANCE | OUTER DIAMETER |
|---|---|
| **75 ± 2 Ω** | **14.2 mm** |

QR500M | 75Ω | 75Ω QR Series Aluminum Tube Coaxial Cable

Custom lengths, connectors and pre-assembled jumpers are available. Send us your specification for a quotation.

TECHNICAL DATA

## Technical parameters

Source: 2026 Technical Selection Manual

### STRUCTURE

| | |
|---|---|
| Inner conductor | CCA wire (CCA) 2.77 mm |
| Dielectric | foam PE 11.43 mm |
| Outer conductor | welded (longitudinal argon-arc) smooth aluminum tube 12.70 mm |
| Jacket | PE or LSZH LSZH 14.20 mm |

### ELECTRICAL

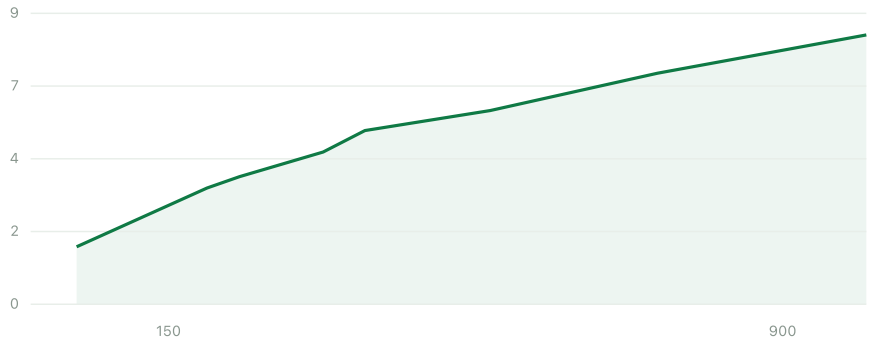
| | |
|---|---|
| Characteristic impedance | 75 ± 2 Ω |

| | |
|---|---|
| Nominal capacitance | 50 ± 3 pF/m |
| Velocity of propagation | 86 % return loss ≥ 24 dB (5–300 MHz); ≥ 22 dB (300–1000 MHz) shielding attenuation ≥ 100 dB (55 MHz); ≥ 110 dB (211–1000 MHz) inner conductor DC resistance ≤ 4.43 Ω/km (20 °C) |
| Insulation resistance | ≥ 5000 MΩ·km jacket spark test ≥ 4000 V AC |

## MECHANICAL & ENVIRONMENT

| | |
|---|---|
| Min. bending radius | ≈ 142 mm (10 × cable OD) max. tensile force ≈ 136 kgf self-supporting strand optional (QR500M, for aerial installation) |
| Operating temperature | PE –40 ~ +85 °C; PVC –25 ~ +70 °C |
| Standards | GY/T 135, SJ/T 11138 |
| Applications | CATV trunk line / distribution trunk, HFC long-distance bidirectional HFC transmission |

## ATTENUATION & POWER




Attenuation in dB/100 m at 20 °C, nominal values (±5%).

| MHz | dB/100m | MHz | dB/100m |
|---|---|---|---|
| 55 | 1.77 | 400 | 5.35 |
| 211 | 3.58 | 550 | 5.97 |
| 250 | 3.93 | 750 | 7.12 |
| 350 | 4.69 | 1000 | 8.3 |

# Product description

75Ω physically foamed argon-arc welded aluminum tube cable per GY/T135-1998, for CATV and video transmission. Please contact us for detailed specifications.