



According standards: C 90131 - France Télécom: C 12.21 H - Edition 2 - 06/98

| | | |
|-------------------|------------------|------------------|
| Cable type | Standard: | 713CRC8 |
| Size: A2 | Aerial: | F 713CRC8 |
| | Units | Nominal |

Construction

| | | | |
|---------------------------|----|--------------------------|--------|
| INNER CONDUCTOR | | | |
| Material and construction | - | copper wire | |
| Diameter | mm | 3.3 | |
| DIELECTRIC | | | |
| Material | - | gas-injected cellular PE | |
| Diameter | mm | 13.3 | |
| OUTER CONDUCTOR | | | |
| Material and construction | - | smooth copper tape | |
| OUTER SHEATH | | | |
| Material | - | black HD-PE | |
| Thickness | mm | 1.8 | > 1.43 |
| Overall diameter | mm | 17.7 | < 18 |

Cable with messenger

| | | | |
|-------------------------|---------|------------------|--|
| MESSENGER | | | |
| Material | - | galvanized steel | |
| Construction | .. X mm | 19 x 0.8 | |
| Height of web | mm | 3.5 | |
| Wide of web | mm | 1.8 | |
| Diameter over messenger | mm | 7.8 | |

Mechanical characteristics

| | | | |
|--|------|-------|-----|
| Minimum bending radius | 1 x | cm | 12 |
| | 10 x | cm | 24 |
| Maximum pulling strength (without messenger) | | daN | 200 |
| Weight | | kg/km | 270 |

Cable with messenger

| | | |
|--|-------|-------|
| Minimum breaking strength of messenger | daN | 12250 |
| Weight | kg/km | 392 |

Electrical characteristics

| | | | |
|--|--|-----------|-----------|
| Characteristic impedance | Ω | 75 | +/- 2 |
| Capacity | pF/m | 50 | |
| Relative propagation velocity (velocity ratio) | % | 88 | |
| DC-resistance of inner conductor at 20°C | Ω/km | 2.0 | < 2.1 |
| DC-resistance of outer conductor at 20°C | Ω/km | 2.5 | < 2.6 |
| Current rating (50 - 60) Hz | A | 24 | |
| Dielectric voltage strength | kV | 3 | |
| Longitudinal attenuation at 20°C | $\alpha(f_{[MHz]}) = a \cdot \sqrt{f_{[MHz]}} + b \cdot f_{[MHz]}$ | | |
| | a = | - | 0.192 |
| | b = | - | 0.00023 |
| | 5 MHz | dB/100m | 0.4 < 0.5 |
| | 10 MHz | dB/100m | 0.6 < 0.6 |
| | 30 MHz | dB/100m | 1.1 < 1.1 |
| | 50 MHz | dB/100m | 1.4 < 1.4 |
| | 100 MHz | dB/100m | 1.9 < 2.0 |
| | 200 MHz | dB/100m | 2.8 < 2.9 |
| | 300 MHz | dB/100m | 3.4 < 3.6 |
| | 400 MHz | dB/100m | 3.9 < 4.1 |
| | 470 MHz | dB/100m | 4.3 < 4.5 |
| | 600 MHz | dB/100m | 4.8 < 5.1 |
| | 800 MHz | dB/100m | 5.6 < 5.9 |
| | 860 MHz | dB/100m | 5.8 < 6.1 |
| | 1000 MHz | dB/100m | 6.3 < 6.6 |
| Return loss (3 peak values up to 4 dB lower are permissible) | | | |
| | 30 - 310 MHz | dB (VSWR) | 28 > 24 |
| | 310 - 460 MHz | dB (VSWR) | 26 > 22 |
| | 460 - 585 MHz | dB (VSWR) | 24 > 20 |
| | 585 - 862 MHz | dB (VSWR) | 23 > 19 |

