



| | | |
|-----------------|--------------|---------|
| Cable type | underground: | 7128 |
| Size: 1/2" - LD | aerial: | A 7128 |
| | Units | Nominal |

Construction

| | | | |
|-------------------------------|----|--------------------------|--------|
| INNER CONDUCTOR | | | |
| Material and construction | - | copper wire | |
| Diameter | mm | 3.1 | |
| DIELECTRIC | | | |
| Material | - | gas-injected cellular PE | |
| Diameter | mm | 12.4 | |
| OUTER CONDUCTOR | | | |
| Material and construction | - | corrugated copper tube | |
| Diameter over outer conductor | mm | 13.7 | |
| OUTER SHEATH | | | |
| Material | - | black polyethylene | |
| Thickness | mm | 1.1 | |
| Overall diameter | mm | 16.0 | < 16.3 |

Cable with messenger

| | | | |
|---------------------------|---------|---------|--|
| MESSENGER | | | |
| Material | - | AMS | |
| Construction | .. X mm | 7 x 1.7 | |
| Diameter over messenger | mm | 7.5 | |
| OVERALL DIMENSIONS | mm | 26/16 | |

Mechanical characteristics

| | | | |
|--|------|-------|-----|
| Minimum bending radius | | | |
| | 1 x | cm | 12 |
| | 10 x | cm | 20 |
| Maximum pulling strength (without messenger) | | daN | 85 |
| Weight | | kg/km | 245 |

Cable with messenger

| | | |
|---|-------------------|-----------------------|
| Minimum breaking strength of messenger | daN | 500 |
| Modulus of elasticity | N/mm ² | 62000 |
| Thermal coefficient of linear expansion | 1/°C | 23 x 10 ⁻⁶ |
| Weight | kg/km | 305 |

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 | 2.3 | |
| DC-resistance of outer conductor at 20°C | Ω/km | 1.95 | |
| Current rating (50 - 60) Hz | A | 20 | |
| Dielectric voltage strength | kV | 3 | |
| Longitudinal attenuation at 20°C | $\alpha(f_{[MHz]}) = a \cdot \sqrt{f_{[MHz]}} + b \cdot f_{[MHz]}$ | | |
| | a = | - | 0.197 |
| | b = | - | 0.0007 |
| | 5 MHz | dB/100m | 0.44 < 0.47 |
| | 10 MHz | dB/100m | 0.63 < 0.66 |
| | 30 MHz | dB/100m | 1.10 < 1.16 |
| | 50 MHz | dB/100m | 1.43 < 1.50 |
| | 100 MHz | dB/100m | 2.04 < 2.14 |
| | 200 MHz | dB/100m | 2.93 < 3.07 |
| | 300 MHz | dB/100m | 3.62 < 3.80 |
| | 400 MHz | dB/100m | 4.22 < 4.43 |
| | 470 MHz | dB/100m | 4.60 < 4.83 |
| | 600 MHz | dB/100m | 5.25 < 5.51 |
| | 800 MHz | dB/100m | 6.13 < 6.44 |
| | 860 MHz | dB/100m | 6.38 < 6.70 |
| | 1000 MHz | dB/100m | 6.93 < 7.28 |
| Return loss (3 peak values up to 4 dB lower are permissible) | | | |
| | 5 - 470 MHz | dB | > 26 |
| | 470 - 862 MHz | dB | > 22 |
| Screening attenuation (30 - 1000 MHz) | | dB | >> 120 |

