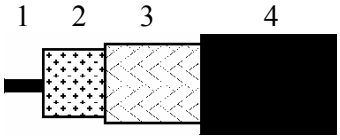
## APPLICATION

Coaxial cables used for Radio-frequency designed according the International Standard IEC 1196.

## CONSTRUCTION




| | | |
|---|---|---|
| 1 | Inner conductor | Solid soft annealed copper |
| 2 | Dielectric | Gas injected PE |
| 3 | Braid | Annealed copper |
| 4 | Sheath | PVC according the European Standard HD 624. |

## REQUIREMENTS AND TEST METHODS

**Test methods in accordance with International Standard IEC 1196.**

### Mechanical characteristics

| | |
|---|---|
| 1. Inner conductor. | |
| Diameter: | 2.62 mm ± 0.03 mm |
| 2. Dielectric: | |
| Diameter: | 7.15 mm ± 0.2 mm |
| Centricity: | ≥ 0.85 |
| Adhesion: | 41 – 410 N at 50 mm |
| 3. Outer conductor: | |
| Diameter screen: | 7.7 mm ± 0.25 mm |
| Coverage braid: | 25 % ± 5 % |
| 4. Sheath: | |
| Diameter: | 10.3 mm ± 0.3 mm |
| Tensile strength: | ≥ 12.5 N/mm$^2$ |
| Elongation at break: | ≥ 150 % |
| 5. Cable: | |
| Crush resistance of cable: | < 1% (load of 700N) |
| Storage/operating temperature: | -15°C to +70°C |
| Minimum installation temperature: | -5 °C |
| Minimum static bend radius: | 100 mm |
| Total weight: | 137 g/m |

**Electrical characteristics**

| | |
|---|---|
| Mean characteristic impedance: | 50 ± 2 Ω |
| Regularity of impedance: | > 46 dB |
| DC loop resistance: | ≤ 38.5 Ω/km |
| DC resistance inner conductor: | ≤ 3.5 Ω/km |
| DC resistance outer conductor: | ≤ 35.0 Ω/km |
| Capacitance: | 80 pF/m ± 3 pF/m |
| Velocity ratio: | 0.83 ± 0.02 |
| Insulation resistance: | > $10^4$ MΩ.km |
| Voltage test of dielectric: | 3 kVdc |

| Attenuation at | Nominal | Attenuation at | Nominal |
|---|---|---|---|
| 10 MHz: | 2.0 dB/100m | 300 MHz: | 11.4 dB/100m |
| 50 MHz: | 4.5 dB/100m | 400 MHz: | 13.0 dB/100m |
| 100 MHz: | 6.3 dB/100m | 860 MHz: | 19.4 dB/100m |
| 230 MHz: | 9.6 dB/100m | 1000 MHz: | 22.5 dB/100m |

Maximum attenuation is 10% higher.