

Coaxial Cable RADOX_RF_59

Description

PE cross-linked - 75 Ohm - single screen



Technical Data

Construction

| | Material | Detail | Diameter |
|------------------|---------------------------------|---------------|------------------|
| Centre conductor | Copper, Tin plated | Strand-07 | 0.66 mm |
| Dielectric | PEX (Polyethylene cross-linked) | | 3.83 mm |
| Outer conductor | Copper, Tin plated | Braid, 94% | 4.42 mm |
| Jacket | RADOX EM104 | RAL 9005 - bk | 6.24 mm +/- 0.06 |

Print: HUBER+SUHNER RADOX_RF_59 75 OHM (PA no.)

Electrical Data

| | |
|--------------------------------|--------------------------------------|
| Impedance | 75 Ω +/- 3 |
| Operating Frequency | 1 GHz |
| Capacitance | 68 pF/m |
| Velocity of signal propagation | 66.1 % |
| Signal delay | 5.05 ns/m |
| Insulation resistance | ≥ 1 x 10 ⁸ MQm |
| Min. screening effectiveness | ≥ 40 dB (up to 1 GHz) |
| Max. operating voltage | ≤ 3 kV _{rms} (at sea level) |
| Test voltage | 5 kV _{rms} (50 Hz/1 min) |

Mechanical Data

| | | |
|---------------------|---------|--------------|
| Weight | | 5.5 kg/100 m |
| Min. bending radius | static | 35 mm |
| | dynamic | 60 mm |

Environmental Data

| | |
|--------------------------|-------------------------------|
| Temperature range | -40 °C... +105 °C |
| Installation temperature | -20 °C... +60 °C |
| Flammability | EN 60332-1-2, IEC 60332-3-25, |
| Smoke density | EN 61034-2 |
| Halogen test | IEC 60754 |
| 2011/95/EC (RoHS) | compliant |

Additional Information

EN 45545 compliant

Hazard level for indoor cables: HL3

Ordering Information

Order as RADOX_RF_59

Remarks

(For details refer to the HUBER+SUHNER RF CABLES GENERAL CATALOGUE or contact your nearest HUBER+SUHNER partner)

Suitable Connectors

Cable group U16 4 mm / 75 Ohm

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Matrix typical Attenuation [formula: $(a \cdot f^{0.5} + b \cdot f)$] and maximum Power CW [formula: $(p/f^{0.5})$]

Coefficients:

a = 0.325

b = 0.163

$f_{max} = 1$

P at 1GHz = 93

| Frequency (GHz) | Nom. attenuation (dB / m) sea level 25° C ambient temperature | Nom. attenuation (dB / ft) sea level 25° C ambient temperature | Max. CW power (watt) sea level 40° C ambient temperature |
|--------------------|---|--|--|
| 0.05 | 0.08 | 0.025 | 416 |
| 0.1 | 0.12 | 0.036 | 294 |
| 0.15 | 0.15 | 0.046 | 240 |
| 0.2 | 0.18 | 0.054 | 208 |
| 0.25 | 0.2 | 0.062 | 186 |
| 0.3 | 0.23 | 0.069 | 170 |
| 0.35 | 0.25 | 0.076 | 157 |
| 0.4 | 0.27 | 0.083 | 147 |
| 0.45 | 0.29 | 0.089 | 139 |
| 0.5 | 0.31 | 0.095 | 132 |
| 0.55 | 0.33 | 0.101 | 125 |
| 0.6 | 0.35 | 0.107 | 120 |
| 0.65 | 0.37 | 0.112 | 115 |
| 0.7 | 0.39 | 0.118 | 111 |
| 0.75 | 0.4 | 0.123 | 107 |
| 0.8 | 0.42 | 0.128 | 104 |
| 0.85 | 0.44 | 0.134 | 101 |
| 0.9 | 0.46 | 0.139 | 98 |
| 0.95 | 0.47 | 0.144 | 95 |
| 1.0 | 0.49 | 0.149 | 93 |