

RFF 1/2" FLEXIBLE COAXIAL CABLE

| | | |
|-----------------|-----------------------------------|-------------------|
| NK CODES | RFF 1/2"-50 | NKRFF01200 |
| | RFF 1/2"-50 GHF | NKRFF01201 |
| | RFF 1/2"-50 BHF | NKRFF01202 |
| | RFF 1/2"-50 BHF (UL) CATVR | NKRFF01204 |

CONSTRUCTION



| | | | |
|-----------------|--|-----------|-----------|
| Inner conductor | Copper-clad aluminium wire | Ø 3.55 mm | (0.14 in) |
| Dielectric | Cellular polyethylene | Ø 9.0 mm | (0.35 in) |
| Outer conductor | Corrugated copper tube | Ø 11.9 mm | (0.47 in) |
| Jacket | See Jacketing Options table below | Ø 13.5 mm | (0.53 in) |
| Marking | NK Cables, cable type, manufacture week, year, batch number and meter mark | | |

ELECTRICAL CHARACTERISTICS at +20°C (+68°F)

| | |
|---|----------------------------|
| Characteristic impedance | 50 ± 1 Ω |
| Return loss 24 dB for 100 m cable with NKC connectors | |
| - 380 - 500 | MHz |
| - 806 - 960 | " |
| - 1710 - 1880 | " |
| - 1900 - 2170 | " |
| Other bands also available on request | |
| Bands according to customer's specifications | |
| Attenuation | See table |
| Velocity factor | 0.82 |
| Capacitance | 82 pF/m (25 pF/ft) |
| Maximum frequency | 12 500 MHz |
| Max power rating | See table |
| Peak RF voltage rating | 1.39 kV |
| Peak power rating | 19.0 kW |
| DC-resistance | |
| - Inner conductor | 2.57 Ω/km (0.78 Ω/1000 ft) |
| - Outer conductor | 3.10 Ω/km (0.94 Ω/1000 ft) |

MECHANICAL CHARACTERISTICS

| | |
|-----------------------------|-----------------------------|
| Weight | 0.19 kg/m (0.13 lb/ft) |
| Maximum pulling force | 900 N (198 lb) |
| Minimum bending radius | |
| - Single bending | 15 mm (0.6 in) |
| - Repeated bending | 30 mm (1.2 in) |
| Operating temperature range | -55...+80°C (-67...+176 °F) |
| Crush resistance | 3.4 kg/mm (190 lb/in) |
| Bending moment | 2.7 Nm (2.0 lb-ft) |
| Recommended clamp distance | 1.0 m (3.3 ft) |

JACKETING OPTIONS

| TYPE | JACKET | IEC 60754 -1/-2 halogen free, non corrosive | IEC 61034 low smoke emission | IEC 60332-3-24 fire retardant | UV retardancy | UL rated | Min. installation temperature |
|----------------------------|--|---|------------------------------------|----------------------------------|------------------|-------------|----------------------------------|
| RFF 1/2"-50 | Black, halogen free polyethylene | yes | no | no | yes | no | -40°C (-40°F) |
| RFF 1/2"-50 GHF | Grey, halogen free fire retardant thermoplastic | yes | yes | yes | no | no | -20°C (-4°F) |
| RFF 1/2"-50 BHF | Black, halogen free fire retardant thermoplastic | yes | yes | yes | yes | no | -20°C (-4°F) |
| RFF 1/2"-50 BHF (UL) CATVR | Black, halogen free fire retardant UL Riser rated jacket | yes | yes | yes | yes | yes | -20°C (-4°F) |

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| FREQUENCY MHz | ATTENUATION dB/100 m | ATTENUATION dB/100 ft | POWER RATING kW |
|------------------|-------------------------|--------------------------|--------------------|
| 10 | 0.972 | 0.296 | 8.4 |
| 30 | 1.70 | 0.517 | 4.8 |
| 50 | 2.20 | 0.671 | 3.7 |
| 88 | 2.94 | 0.896 | 2.7 |
| 100 | 3.14 | 0.957 | 2.6 |
| 108 | 3.27 | 0.996 | 2.5 |
| 174 | 4.18 | 1.28 | 1.9 |
| 200 | 4.50 | 1.37 | 1.8 |
| 300 | 5.56 | 1.70 | 1.4 |
| 400 | 6.48 | 1.97 | 1.2 |
| 450 | 6.89 | 2.10 | 1.2 |
| 500 | 7.29 | 2.22 | 1.1 |
| 512 | 7.38 | 2.25 | 1.1 |
| 600 | 8.04 | 2.45 | 0.99 |
| 700 | 8.73 | 2.66 | 0.91 |
| 800 | 9.38 | 2.86 | 0.85 |
| 850 | 9.70 | 2.96 | 0.82 |
| 890 | 9.94 | 3.03 | 0.80 |
| 900 | 10.0 | 3.05 | 0.79 |
| 950 | 10.3 | 3.14 | 0.77 |
| 960 | 10.4 | 3.16 | 0.77 |
| 1000 | 10.6 | 3.23 | 0.75 |
| 1200 | 11.7 | 3.57 | 0.68 |
| 1400 | 12.7 | 3.88 | 0.62 |
| 1600 | 13.7 | 4.18 | 0.58 |
| 1800 | 14.7 | 4.47 | 0.54 |
| 1900 | 15.1 | 4.60 | 0.52 |
| 2000 | 15.5 | 4.74 | 0.51 |
| 2200 | 16.4 | 5.00 | 0.48 |
| 2400 | 17.2 | 5.25 | 0.46 |
| 2600 | 18.0 | 5.50 | 0.44 |
| 2800 | 18.8 | 5.73 | 0.42 |
| 3000 | 19.6 | 5.97 | 0.40 |
| 3400 | 21.0 | 6.41 | 0.37 |
| 4000 | 23.1 | 7.05 | 0.34 |
| 6000 | 29.4 | 8.95 | 0.27 |
| 8000 | 35.0 | 10.7 | 0.22 |
| 12400 | 45.9 | 14.0 | 0.17 |

Attenuation values are typical at ambient temperature +20°C (+68°F).
 Power rating ambient temperature +40°C (+104°F), inner conductor +100°C (+212°F).

CODES FOR NKC CONNECTORS

| CONNECTOR TYPE | NK CODE |
|-----------------------|------------|
| N male | NKC2012300 |
| N female | NKC2012400 |
| 7-16 male | NKC2012100 |
| 7-16 female | NKC2012200 |
| N male Right angle | NKC2012600 |
| 7-16 male Right angle | NKC2012500 |