

RFA 1 5/8" COAXIAL CABLE

NK CODES

RFA 1 5/8"-50
RFA 1 5/8"-50 GHF
RFA 1 5/8"-50 BHF

NKRFA15800
NKRFA15801
NKRFA15802

CONSTRUCTION



| | | | |
|-----------------|--|-----------|-----------|
| Inner conductor | Corrugated copper tube | Ø 17.6 mm | (0.69 in) |
| Dielectric | Cellular polyethylene | Ø 42.0 mm | (1.65 in) |
| Outer conductor | Corrugated copper tube | Ø 46.3 mm | (1.82 in) |
| Jacket | See Jacketing Options table below | Ø 50.0 mm | (1.97 in) |
| Marking | Draka, 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 | 0.89 |
| Capacitance | 74 pF/m (22.6 pF/ft) |
| Maximum frequency | 2800 MHz |
| Max power rating | See table |
| Peak RF voltage rating | 5.7 kV |
| Peak power rating | 314 kW |
| DC-resistance | |
| - Inner conductor | 1.16 Ω/km (0.35 Ω/1000 ft) |
| - Outer conductor | 0.43 Ω/km (0.13 Ω/1000 ft) |

MECHANICAL CHARACTERISTICS

| | |
|-----------------------------|-----------------------------|
| Weight | 1.16 kg/m (0.78 lb/ft) |
| Maximum pulling force | 3900 N (860 lb) |
| Minimum bending radius | |
| - Single bending | 200 mm (7.9 in) |
| - Repeated bending | 400 mm (15.7 in) |
| Operating temperature range | -55...+80°C (-67...+176 °F) |
| Crush resistance | 3.1 kg/mm (173 lb/in) |
| Bending moment | 45 Nm (33) |
| Recommended clamp spacing | 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 | Min. installation temperature |
|-------------------|--|---|------------------------------------|----------------------------------|------------------|----------------------------------|
| RFA 1 5/8"-50 | Black, halogen free polyethylene (LDPE with HDPE skin) | yes | no | no | yes | -40°C (-40°F) |
| RFA 1 5/8"-50 GHF | Grey, halogen free fire retardant thermoplastic | yes | yes | yes | no | -5°C (23°F) |
| RFA 1 5/8"-50 BHF | Black, halogen free fire retardant thermoplastic | yes | yes | yes | yes | -5°C (23°F) |

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| FREQUENCY MHz | ATTENUATION dB/100 m | ATTENUATION dB/100 ft | POWER RATING kW |
|------------------|-------------------------|--------------------------|--------------------|
| 10 | 0.196 | 0.060 | 55 |
| 30 | 0.343 | 0.105 | 31 |
| 50 | 0.447 | 0.136 | 24 |
| 88 | 0.601 | 0.183 | 18 |
| 100 | 0.643 | 0.196 | 17 |
| 108 | 0.669 | 0.204 | 16 |
| 174 | 0.863 | 0.263 | 12 |
| 200 | 0.929 | 0.283 | 11 |
| 300 | 1.16 | 0.353 | 9.1 |
| 400 | 1.36 | 0.413 | 7.8 |
| 450 | 1.45 | 0.441 | 7.3 |
| 500 | 1.54 | 0.468 | 6.9 |
| 512 | 1.56 | 0.474 | 6.8 |
| 600 | 1.70 | 0.518 | 6.2 |
| 700 | 1.85 | 0.565 | 5.7 |
| 800 | 2.00 | 0.610 | 5.3 |
| 850 | 2.07 | 0.631 | 5.1 |
| 890 | 2.13 | 0.648 | 5.0 |
| 900 | 2.14 | 0.652 | 4.9 |
| 950 | 2.21 | 0.673 | 4.8 |
| 960 | 2.22 | 0.677 | 4.7 |
| 1000 | 2.27 | 0.693 | 4.6 |
| 1200 | 2.53 | 0.770 | 4.2 |
| 1400 | 2.77 | 0.843 | 3.8 |
| 1600 | 2.99 | 0.913 | 3.5 |
| 1800 | 3.21 | 0.979 | 3.3 |
| 1900 | 3.32 | 1.01 | 3.2 |
| 2000 | 3.42 | 1.04 | 3.1 |
| 2200 | 3.63 | 1.11 | 2.9 |
| 2400 | 3.82 | 1.17 | 2.7 |
| 2600 | 4.02 | 1.22 | 2.6 |
| 2800 | 4.20 | 1.28 | 2.5 |

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 | NKC1158300 |
| N female | NKC1158400 |
| 7-16 male | NKC1158100 |
| 7-16 female | NKC1158200 |
| 7-16 Bulkhead female | NKC1158290 |