29.2.2008



COAXIAL ANTENNA TYPE: NK CODE:

RFX 1 5/8"-50 NKRFX15800
RFX 1 5/8"-50 BHF NKRFX15802
RFX 1 5/8"-50 MBHF NKRFX15807

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 single side slotted 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 | $50 \pm 2 \Omega$ | |
|---|-------------------|------------------|
| Typical return loss (VSWR) on effective frequency range | 18 dB | (1.29) |
| Velocity factor | 0.89 | |
| Capacitance | 74 pF/m | (22.6 pF/ft) |
| Maximum frequency | 2800 MHz | |
| DC-resistance | | |
| - Inner conductor | 1.16 Ω/km | (0.35 Ω/1000 ft) |
| - Outer conductor | 0.43 Ω/km | (0.13 Ω/1000 ft) |

Attenuation (typical, measured acc. to IEC 61196-4 free space method) at 75 MHz 0.7 dB/100m (0.21 dB/100m)

| at 10 IVII IZ | 0.7 ab/100111 | (0.2 i ab/ ioo |
|---------------|---------------|----------------|
| at 150 " | 0.9 " | (0.27 ") |
| at 450 " | 1.7 " | (0.52 ") |
| at 900 " | 2.7 " | (0.82 ") |
| at 1.8 GHz | 4.6 " | (1.40 ") |
| at 2.1 " | 5.2 " | (1.58 ") |
| at 2.4 " | 6.2 " | (1.89 ") |
| | | |

Coupling loss (typical, measured acc. to IEC 61196-4 free space method)

| | <u>50% value</u> | <u>95% value</u> |
|------------|------------------|------------------|
| at 75 MHz | 53 dB | 60 dB |
| at 150 " | 63 " | 69 " |
| at 450 " | 68 " | 73 " |
| at 900 " | 68 " | 73 " |
| at 1.8 GHz | 69 " | 75 " |
| at 2.1 " | 67 " | 72 " |
| at 2.4 " | 68 " | 74 " |
| | | |

MECHANICAL CHARACTERISTICS

| Weight (polyethylene jacket) | 1.13 kg/m | (0.76 lb/ft) |
|--|-----------|--------------|
| Weight (GHF/BHF fire retardant jacket) | 1.29 kg/m | (0.87 lb/ft) |
| Maximum pulling force | 3750 Ň | (826 lb) |
| Minimum single bending radius | 400 mm | (15.7 iń) |
| Operating temperature range | -55+80°C | (-67+176 °F) |

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 |
|--------------------|--|---|------------------------------------|----------------------------------|------------------|-------------------------------|
| RFX 1 5/8"-50 | Black, halogen free polyethylene | yes | no | no | yes | -40°C (-40°F) |
| RFX 1 5/8"-50 BHF | Black, halogen free fire retardant thermoplastic | yes | no | yes | yes | -5°C (+23°F) |
| RFX 1 5/8"-50 MBHF | Black, halogen free fire retardant thermoplastic with mica tape fire barrier | yes | yes | yes | yes | -5°C (+23°F) |

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