

Coaxial Antennas

RFX 1/2"-50

RF2X 1/2"-50

Specifications

| COAXIAL CABLE | |
|------------------|-------------|
| Type | Code |
| RFX 1/2"-50 | NKRFX01200 |
| RFX 1/2"-50 GHF | NKRFX01201 |
| RFX 1/2"-50 BHF | NKRFX01202 |
| RF2X 1/2"-50 | NKRF2X01200 |
| RF2X 1/2"-50 GHF | NKRF2X01201 |
| RF2X 1/2"-50 BHF | NKRF2X01202 |

| CONSTRUCTION | | | |
|-----------------|--|-----------|-----------|
| Inner conductor | Copper-clad aluminium wire | Ø 4.8 mm | (0.19 in) |
| Dielectric | Cellular polyethylene | Ø 12.1 mm | (0.48 in) |
| Outer conductor | Corrugated slotted copper tube | Ø 13.9 mm | (0.55 in) |
| Jacket | See Jacketing Options table below | Ø 16.0 mm | (0.63 in) |
| Marking | Draka, cable type, manufacture week, year, batch number and meter mark | | |

| MECHANICAL CHARACTERISTICS | | | |
|-------------------------------|-------------|----------------|--|
| Weight | 0.22 kg/m | (0.15 lb/ft) | |
| Maximum pulling force | 2550 N | (562 lb) | |
| Minimum single bending radius | 120 mm | (4.7 in) | |
| Operating temperature range | -55...+80°C | (-67...+176°F) | |
| 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 60332-1 fire retardant | UV Retardancy | Min. installation temperature |
| RFX 1/2"-50 RF2X 1/2"-50 | Black, halogen free polyethylene | yes | no | no | yes | -40°C (-40°F) |
| RFX 1/2"-50 GHF RF2X 1/2"-50 GHF | Grey, halogen free fire retardant thermoplastic | yes | yes | yes | no | -20°C (-4°F) |
| RFX 1/2"-50 BHF RF2X 1/2"-50 BHF | Black, halogen free fire retardant thermoplastic | yes | yes | yes | yes | -20°C (-4°F) |

| ELECTRICAL CHARACTERISTICS at +20°C (+68°F) | | |
|---|-----------|------------------|
| Characteristic impedance | 50 ± 2 Ω | |
| Typical return loss (VSWR) on effective frequency range | 18 dB | (1.29) |
| Velocity factor | 0.88 | |
| Capacitance | 76 pF/m | (23 pF/ft) |
| Maximum frequency | 9800 MHz | |
| DC-resistance | | |
| • Inner conductor | 1.44 Ω/km | (0.44 Ω/1000 ft) |
| • Outer conductor | 2.24 Ω/km | (0.68 Ω/1000 ft) |

| ATTENUATION (measured acc. to IEC 61196-4 free space method) | | |
|---|---------------|------------------|
| RFX 1/2"-50 | | |
| at 75 MHz | 2.0 dB/100 m | (0.61 dB/100 ft) |
| at 150 MHz | 2.8 dB/100 m | (0.85 dB/100 ft) |
| at 450 MHz | 5.0 dB/100 m | (1.52 dB/100 ft) |
| at 900 MHz | 7.3 dB/100 m | (2.23 dB/100 ft) |
| at 1.8 GHz | 10.8 dB/100 m | (3.29 dB/100 ft) |
| at 2.1 GHz | 11.7 dB/100 m | (3.57 dB/100 ft) |
| at 2.4 GHz | 12.7 dB/100 m | (3.87 dB/100 ft) |

| COUPLING LOSS (measured acc. to IEC 61196-4 free space method) | | |
|---|-----------|-----------|
| RFX 1/2"-50 | 50% value | 95% value |
| at 75 MHz | 63 dB | 69 dB |
| at 150 MHz | 68 dB | 74 dB |
| at 450 MHz | 76 dB | 82 dB |
| at 900 MHz | 78 dB | 83 dB |
| at 1.8 GHz | 79 dB | 86 dB |
| at 2.1 GHz | 80 dB | 88 dB |
| at 2.4 GHz | 81 dB | 91 dB |

| RF2X 1/2"-50 | | |
|--------------|---------------|------------------|
| at 75 MHz | 2.2 dB/100 m | (0.67 dB/100 ft) |
| at 150 MHz | 3.1 dB/100 m | (0.94 dB/100 ft) |
| at 450 MHz | 5.7 dB/100 m | (1.74 dB/100 ft) |
| at 900 MHz | 8.4 dB/100 m | (2.56 dB/100 ft) |
| at 1.8 GHz | 12.7 dB/100 m | (3.87 dB/100 ft) |
| at 2.1 GHz | 14.0 dB/100 m | (4.27 dB/100 ft) |
| at 2.4 GHz | 15.1 dB/100 m | (4.60 dB/100 ft) |

| RF2X 1/2"-50 | 50% value | 95% value |
|--------------|-----------|-----------|
| at 75 MHz | 57 dB | 64 dB |
| at 150 MHz | 63 dB | 68 dB |
| at 450 MHz | 69 dB | 74 dB |
| at 900 MHz | 71 dB | 78 dB |
| at 1.8 GHz | 77 dB | 83 dB |
| at 2.1 GHz | 74 dB | 81 dB |
| at 2.4 GHz | 76 dB | 85 dB |

| STANDARD DRUM | | | | | | | |
|---------------|------|-----------------|-----------------|-----------------|---------------------|--------------|------------------------|
| Cable type | Drum | Standard length | Outer diam. (D) | Outer width (W) | Drum weight (empty) | Total weight | Drum freight volume |
| | | m (ft) | cm (in) | cm (in) | kg (lb) | kg (lb) | m ³ (cu.ft) |
| RFX 1/2" | P11D | 500 (1640) | 114 (45) | 55 (22) | 43 (95) | 170 (375) | 0.71 (25.07) |

| CODES FOR NKC CONNECTORS | |
|--------------------------|------------|
| Connector type | Code |
| 7-16 male | NKC1012100 |
| 7-16 female | NKC1012200 |
| N male | NKC1012300 |
| N female | NKC1012400 |
| 7-16 male Right angle | NKC1012500 |
| N male Right angle | NKC1012600 |



Coaxial Antennas

RFX 5/8"-50

RF2X 5/8"-50

Specifications

COAXIAL CABLE

| Type | Code |
|------------------|-------------|
| RFX 5/8"-50 | NKRFX05800 |
| RFX 5/8"-50 GHF | NKRFX05801 |
| RFX 5/8"-50 BHF | NKRFX05802 |
| RF2X 5/8"-50 | NKRF2X05800 |
| RF2X 5/8"-50 GHF | NKRF2X05801 |
| RF2X 5/8"-50 BHF | NKRF2X05802 |

CONSTRUCTION

| | | | |
|-----------------|--|-----------|-----------|
| Inner conductor | Copper tube | Ø 7.0 mm | (0.28 in) |
| Dielectric | Cellular polyethylene | Ø 17.6 mm | (0.69 in) |
| Outer conductor | Corrugated slotted copper tube | Ø 19.7 mm | (0.78 in) |
| Jacket | See Jacketing Options table below | Ø 21.9 mm | (0.86 in) |
| Marking | Draka, cable type, manufacture week, year, batch number and meter mark | | |

MECHANICAL CHARACTERISTICS

| | | |
|-------------------------------|-------------|----------------|
| Weight | 0.40 kg/m | (0.27 lb/ft) |
| Maximum pulling force | 3750 N | (826 lb) |
| Minimum single bending radius | 150 mm | (6 in) |
| Operating temperature range | -55...+80°C | (-67...+176°F) |
| 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 60332-1 fire retardant | UV Retardancy | Min. installation temperature |
|-------------------------------------|--|---|------------------------------------|-------------------------------|------------------|----------------------------------|
| RFX 5/8"-50 RF2X 5/8"-50 | Black, halogen free polyethylene | yes | no | no | yes | -40°C (-40°F) |
| RFX 5/8"-50 GHF RF2X 5/8"-50 GHF | Grey, halogen free fire retardant thermoplastic | yes | yes | yes | no | -20°C (-4°F) |
| RFX 5/8"-50 BHF RF2X 5/8"-50 BHF | Black, halogen free fire retardant thermoplastic | yes | yes | yes | yes | -20°C (-4°F) |

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

| | | |
|---|-----------|------------------|
| Characteristic impedance | 50 ± 2 Ω | |
| Typical return loss (VSWR) on effective frequency range | 18 dB | (1.29) |
| Velocity factor | 0.88 | |
| Capacitance | 76 pF/m | (23 pF/ft) |
| Maximum frequency | 6600 MHz | |
| DC-resistance | | |
| • Inner conductor | 1.08 Ω/km | (0.33 Ω/1000 ft) |
| • Outer conductor | 1.23 Ω/km | (0.37 Ω/1000 ft) |

ATTENUATION

(measured acc. to IEC 61196-4 free space method)

RFX 5/8"-50

| | | |
|------------|---------------|------------------|
| at 75 MHz | 1.5 dB/100 m | (0.46 dB/100 ft) |
| at 150 MHz | 2.2 dB/100 m | (0.67 dB/100 ft) |
| at 450 MHz | 3.8 dB/100 m | (1.16 dB/100 ft) |
| at 900 MHz | 5.5 dB/100 m | (1.68 dB/100 ft) |
| at 1.8 GHz | 8.2 dB/100 m | (2.50 dB/100 ft) |
| at 2.2 GHz | 9.3 dB/100 m | (2.84 dB/100 ft) |
| at 2.4 GHz | 10.0 dB/100 m | (3.05 dB/100 ft) |

RF2X 5/8"-50

| | | |
|------------|---------------|------------------|
| at 75 MHz | 1.6 dB/100 m | (0.49 dB/100 ft) |
| at 150 MHz | 2.3 dB/100 m | (0.70 dB/100 ft) |
| at 450 MHz | 3.9 dB/100 m | (1.19 dB/100 ft) |
| at 900 MHz | 5.6 dB/100 m | (1.71 dB/100 ft) |
| at 1.8 GHz | 8.3 dB/100 m | (2.53 dB/100 ft) |
| at 2.2 GHz | 9.5 dB/100 m | (2.90 dB/100 ft) |
| at 2.4 GHz | 10.2 dB/100 m | (3.11 dB/100 ft) |

COUPLING LOSS

(measured acc. to IEC 61196-4 free space method)

RFX 5/8"-50

| | 50% value | 95% value |
|------------|-----------|-----------|
| at 75 MHz | 65 dB | 71 dB |
| at 150 MHz | 69 dB | 76 dB |
| at 450 MHz | 69 dB | 76 dB |
| at 900 MHz | 72 dB | 79 dB |
| at 1.8 GHz | 77 dB | 83 dB |
| at 2.2 GHz | 75 dB | 80 dB |
| at 2.4 GHz | 76 dB | 83 dB |

RF2X 5/8"-50

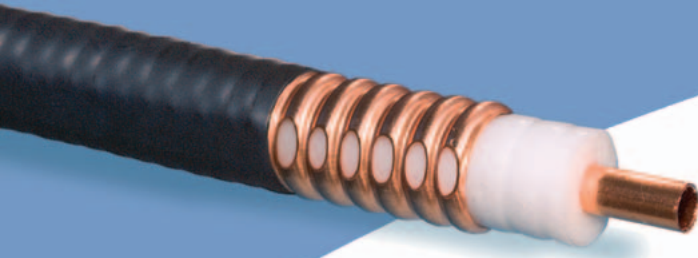
| | 50% value | 95% value |
|------------|-----------|-----------|
| at 75 MHz | 60 dB | 66 dB |
| at 150 MHz | 66 dB | 70 dB |
| at 450 MHz | 69 dB | 76 dB |
| at 900 MHz | 70 dB | 76 dB |
| at 1.8 GHz | 74 dB | 80 dB |
| at 2.2 GHz | 73 dB | 79 dB |
| at 2.4 GHz | 75 dB | 82 dB |

STANDARD DRUM

| Cable type | Drum | Standard length | Outer diam. (D) | Outer width (W) | Drum weight (empty) | Total weight | Drum freight volume |
|------------|------|-----------------|-----------------|-----------------|---------------------|--------------|------------------------|
| | | m (ft) | cm (in) | cm (in) | kg (lb) | kg (lb) | m ³ (cu.ft) |
| RFX 5/8" | P13G | 500 (1640) | 134 (52) | 74 (29) | 68 (150) | 297 (655) | 1.33 (46.97) |

CODES FOR NKC CONNECTORS

| Connector type | Code |
|----------------|------------|
| 7-16 male | NKC1058100 |
| 7-16 female | NKC1058200 |
| N male | NKC1058300 |
| N female | NKC1058400 |



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RFX 7/8"-50

RF2X 7/8"-50

Specifications

| COAXIAL CABLE | |
|------------------|--------------|
| Type | Code |
| RFX 7/8"-50 | NKRFX07800 |
| RFX 7/8"-50 GHF | NKRFX07801 |
| RFX 7/8"-50 BHF | NKRFX07802 |
| RF2X 7/8"-50 | NKRFX2X07800 |
| RF2X 7/8"-50 GHF | NKRFX2X07801 |
| RF2X 7/8"-50 BHF | NKRFX2X07802 |

| CONSTRUCTION | | | |
|-----------------|--|-----------|-----------|
| Inner conductor | Copper tube | Ø 9.3 mm | (0.37 in) |
| Dielectric | Cellular polyethylene | Ø 22.0 mm | (0.86 in) |
| Outer conductor | Corrugated slotted copper tube | Ø 25.2 mm | (0.99 in) |
| Jacket | See Jacketing Options table below | Ø 27.8 mm | (1.09 in) |
| Marking | Draka, cable type, manufacture week, year, batch number and meter mark | | |

| MECHANICAL CHARACTERISTICS | | | |
|-------------------------------|-------------|----------------|--|
| Weight | 0.46 kg/m | (0.31 lb/ft) | |
| Maximum pulling force | 2800 N | (617 lb) | |
| Minimum single bending radius | 240 mm | (9.4 in) | |
| Operating temperature range | -55...+80°C | (-67...+176°F) | |
| 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 60332-1 fire retardant | UV Retardancy | Min. installation temperature |
| RFX 7/8"-50 RF2X 17/8"-50 | Black, halogen free polyethylene | yes | no | no | yes | -40°C (-40°F) |
| RFX 7/8"-50 GHF RF2X 7/8"-50 GHF | Grey, halogen free fire retardant thermoplastic | yes | yes | yes | no | -20°C (-4°F) |
| RFX 7/8"-50 BHF RF2X 7/8"-50 BHF | Black, halogen free fire retardant thermoplastic | yes | yes | yes | yes | -20°C (-4°F) |

| ELECTRICAL CHARACTERISTICS at +20°C (+68°F) | | |
|---|-----------|------------------|
| Characteristic impedance | 50 ± 2 Ω | |
| Typical return loss (VSWR) on effective frequency range | 18 dB | (1.29) |
| Velocity factor | 0.90 | |
| Capacitance | 73 pF/m | (22.3 pF/ft) |
| Maximum frequency | 5100 MHz | |
| DC-resistance | | |
| • Inner conductor | 1.11 Ω/km | (0.34 Ω/1000 ft) |
| • Outer conductor | 1.11 Ω/km | (0.34 Ω/1000 ft) |

| ATTENUATION (measured acc. to IEC 61196-4 free space method) | | |
|---|--------------|------------------|
| RFX 7/8"-50 | | |
| at 75 MHz | 1.2 dB/100 m | (0.37 dB/100 ft) |
| at 150 MHz | 1.6 dB/100 m | (0.49 dB/100 ft) |
| at 450 MHz | 3.0 dB/100 m | (0.91 dB/100 ft) |
| at 900 MHz | 4.5 dB/100 m | (1.37 dB/100 ft) |
| at 1.8 GHz | 6.9 dB/100 m | (2.10 dB/100 ft) |
| at 2.1 GHz | 7.9 dB/100 m | (2.41 dB/100 ft) |
| at 2.4 GHz | 8.6 dB/100 m | (2.62 dB/100 ft) |

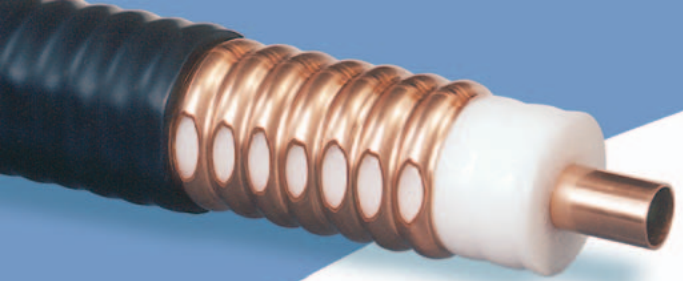
| COUPLING LOSS (measured acc. to IEC 61196-4 free space method) | | |
|---|-----------|-----------|
| RFX 7/8"-50 | 50% value | 95% value |
| at 75 MHz | 51 dB | 61 dB |
| at 150 MHz | 63 dB | 69 dB |
| at 450 MHz | 69 dB | 73 dB |
| at 900 MHz | 70 dB | 78 dB |
| at 1.8 GHz | 72 dB | 77 dB |
| at 2.1 GHz | 71 dB | 76 dB |
| at 2.4 GHz | 77 dB | 84 dB |

| RF2X 7/8"-50 | | |
|--------------|---------------|------------------|
| at 75 MHz | 1.4 dB/100 m | (0.43 dB/100 ft) |
| at 150 MHz | 1.8 dB/100 m | (0.55 dB/100 ft) |
| at 450 MHz | 3.5 dB/100 m | (1.07 dB/100 ft) |
| at 900 MHz | 5.4 dB/100 m | (1.65 dB/100 ft) |
| at 1.8 GHz | 8.8 dB/100 m | (2.68 dB/100 ft) |
| at 2.1 GHz | 10.0 dB/100 m | (3.05 dB/100 ft) |
| at 2.4 GHz | 11.3 dB/100 m | (3.44 dB/100 ft) |

| RF2X 7/8"-50 | 50% value | 95% value |
|--------------|-----------|-----------|
| at 75 MHz | 49 dB | 55 dB |
| at 150 MHz | 57 dB | 62 dB |
| at 450 MHz | 62 dB | 69 dB |
| at 900 MHz | 64 dB | 71 dB |
| at 1.8 GHz | 65 dB | 71 dB |
| at 2.1 GHz | 67 dB | 74 dB |
| at 2.4 GHz | 68 dB | 77 dB |

| STANDARD DRUM | | | | | | | |
|---------------|------|-----------------|-----------------|-----------------|---------------------|--------------|------------------------|
| Cable type | Drum | Standard length | Outer diam. (D) | Outer width (W) | Drum weight (empty) | Total weight | Drum freight volume |
| | | m (ft) | cm (in) | cm (in) | kg (lb) | kg (lb) | m ³ (cu.ft) |
| RFX 7/8" | P13G | 500 (1640) | 134 (52) | 74 (29) | 68 (150) | 327 (721) | 1.33 (46.97) |

| CODES FOR NKC CONNECTORS | |
|--------------------------|------------|
| Connector type | Code |
| 7-16 male | NKC1078100 |
| 7-16 female | NKC1078200 |
| 7-16 Bulkhead female | NKC1078290 |
| N male | NKC1078300 |
| N female | NKC1078400 |
| 7-16 male Right angle | NKC1078500 |



Coaxial Antennas

RFX 1 1/4"-50

RF2X 1 1/4"-50

Specifications

| COAXIAL CABLE | |
|--------------------|-------------|
| Type | Code |
| RFX 1 1/4"-50 | NKRFX11400 |
| RFX 1 1/4"-50 GHF | NKRFX11401 |
| RFX 1 1/4"-50 BHF | NKRFX11402 |
| RF2X 1 1/4"-50 | NKRFX211400 |
| RF2X 1 1/4"-50 GHF | NKRFX211401 |
| RF2X 1 1/4"-50 BHF | NKRFX211402 |

| CONSTRUCTION | | | |
|-----------------|--|-----------|-----------|
| Inner conductor | Copper tube | Ø 13.0 mm | (0.51 in) |
| Dielectric | Cellular polyethylene | Ø 32.2 mm | (1.27 in) |
| Outer conductor | Corrugated slotted copper tube | Ø 35.8 mm | (1.41 in) |
| Jacket | See Jacketing Options table below | Ø 39.0 mm | (1.54 in) |
| Marking | Draka, cable type, manufacture week, year, batch number and meter mark | | |

| MECHANICAL CHARACTERISTICS | | | |
|-----------------------------|-------------|----------------|--|
| Weight | 0.86 kg/m | (0.58 lb/ft) | |
| Maximum pulling force | 6050 N | (1340 lb) | |
| Minimum bending radius | 350 mm | (14 in) | |
| Operating temperature range | -55...+80°C | (-67...+176°F) | |
| Recommended clamp spacing | 1.5 m | (5 ft) | |

| JACKETING OPTIONS | | | | | | |
|---|--|---|------------------------------|----------------------------|---------------|-------------------------------|
| TYPE | JACKET | IEC 60754 -1/-2 halogen free, non corrosive | IEC 61034 low smoke emission | IEC 60332-1 fire retardant | UV Retardancy | Min. installation temperature |
| RFX 1 1/4"-50 RF2X 1 1/4"-50 | Black, halogen free polyethylene | yes | no | no | yes | -40°C (-40°F) |
| RFX 1 1/4"-50 GHF RF2X 1 1/4"-50 GHF | Grey, halogen free fire retardant thermoplastic | yes | yes | yes | no | -5°C (-4°F) |
| RFX 1 1/4"-50 BHF RF2X 1 1/4"-50 BHF | Black, halogen free fire retardant thermoplastic | yes | yes | yes | yes | -5°C (-4°F) |

| ELECTRICAL CHARACTERISTICS at +20°C (+68°F) | | |
|---|-----------|------------------|
| Characteristic impedance | 50 ± 2 Ω | |
| Typical return loss (VSWR) on effective frequency range | 18 dB | (1.29) |
| Velocity factor | 0.88 | |
| Capacitance | 75 pF/m | (23 pF/ft) |
| Maximum frequency | 3500 MHz | |
| DC-resistance | | |
| • Inner conductor | 0.74 Ω/km | (0.22 Ω/1000 ft) |
| • Outer conductor | 0.65 Ω/km | (0.20 Ω/1000 ft) |

| ATTENUATION (measured acc. to IEC 61196-4 free space method) | | |
|---|--------------|------------------|
| RFX 1 1/4"-50 | | |
| at 75 MHz | 0.9 dB/100 m | (0.27 dB/100 ft) |
| at 150 MHz | 1.1 dB/100 m | (0.34 dB/100 ft) |
| at 450 MHz | 2.2 dB/100 m | (0.67 dB/100 ft) |
| at 900 MHz | 3.2 dB/100 m | (0.98 dB/100 ft) |
| at 1.8 GHz | 5.4 dB/100 m | (1.65 dB/100 ft) |
| at 2.1 GHz | 6.1 dB/100 m | (1.86 dB/100 ft) |
| at 2.4 GHz | 6.8 dB/100 m | (2.07 dB/100 ft) |

| COUPLING LOSS (measured acc. to IEC 61196-4 free space method) | | | |
|---|-----------|-----------|--|
| RFX 1 1/4"-50 | 50% value | 95% value | |
| at 75 MHz | 53 dB | 60 dB | |
| at 150 MHz | 62 dB | 69 dB | |
| at 450 MHz | 70 dB | 76 dB | |
| at 900 MHz | 71 dB | 76 dB | |
| at 1.8 GHz | 71 dB | 75 dB | |
| at 2.1 GHz | 68 dB | 72 dB | |
| at 2.4 GHz | 68 dB | 73 dB | |

| RF2X 1 1/4"-50 | | |
|----------------|---------------|------------------|
| at 75 MHz | 1.0 dB/100 m | (0.30 dB/100 ft) |
| at 150 MHz | 1.4 dB/100 m | (0.43 dB/100 ft) |
| at 450 MHz | 2.5 dB/100 m | (0.76 dB/100 ft) |
| at 900 MHz | 4.1 dB/100 m | (1.25 dB/100 ft) |
| at 1.8 GHz | 7.9 dB/100 m | (2.41 dB/100 ft) |
| at 2.1 GHz | 9.1 dB/100 m | (2.77 dB/100 ft) |
| at 2.4 GHz | 11.2 dB/100 m | (3.41 dB/100 ft) |

| RF2X 1 1/4"-50 | 50% value | 95% value | |
|----------------|-----------|-----------|--|
| at 75 MHz | 47 dB | 53 dB | |
| at 150 MHz | 54 dB | 60 dB | |
| at 450 MHz | 64 dB | 71 dB | |
| at 900 MHz | 64 dB | 71 dB | |
| at 1.8 GHz | 64 dB | 70 dB | |
| at 2.1 GHz | 65 dB | 71 dB | |
| at 2.4 GHz | 64 dB | 71 dB | |

| STANDARD DRUM | | | | | | | |
|---------------|------|-----------------|-----------------|-----------------|---------------------|--------------|------------------------|
| Cable type | Drum | Standard length | Outer diam. (D) | Outer width (W) | Drum weight (empty) | Total weight | Drum freight volume |
| | | m (ft) | cm (in) | cm (in) | kg (lb) | kg (lb) | m ³ (cu.ft) |
| RFX 1 1/4" | P20G | 600 (1968) | 204 (80) | 74 (29) | 157 (346) | 717 (1581) | 3.08 (108.77) |

| CODES FOR NKC CONNECTORS | |
|--------------------------|------------|
| Connector type | Code |
| 7-16 male | NKC1114100 |
| 7-16 female | NKC1114200 |
| 7-16 Bulkhead female | NKC1114290 |
| N male | NKC1114300 |
| N female | NKC1114400 |



Coaxial Antennas

RFX 1 5/8"-50

RF2X 1 5/8"-50

Specifications

| COAXIAL CABLE | |
|--------------------|-------------|
| Type | Code |
| RFX 1 5/8"-50 | NKRFX15800 |
| RFX 1 5/8"-50 GHF | NKRFX15801 |
| RFX 1 5/8"-50 BHF | NKRFX15802 |
| RF2X 1 5/8"-50 | NKRF2X15800 |
| RF2X 1 5/8"-50 GHF | NKRF2X15801 |
| RF2X 1 5/8"-50 BHF | NKRF2X15802 |

| 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 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 | | |

| MECHANICAL CHARACTERISTICS | | | |
|-------------------------------|-------------|----------------|--|
| Weight | 1.13 kg/m | (0.76 lb/ft) | |
| Maximum pulling force | 3750 N | (826 lb) | |
| Minimum single bending radius | 400 mm | (15.7 in) | |
| Operating temperature range | -55...+80°C | (-67...+176°F) | |
| Recommended clamp spacing | 1.5 m | (5 ft) | |

| JACKETING OPTIONS | | | | | | |
|---|--|---|------------------------------|----------------------------|---------------|-------------------------------|
| TYPE | JACKET | IEC 60754 -1/-2 halogen free, non corrosive | IEC 61034 low smoke emission | IEC 60332-1 fire retardant | UV Retardancy | Min. installation temperature |
| RFX 1 5/8"-50 RF2X 1 5/8"-50 | Black, halogen free polyethylene | yes | no | no | yes | -40°C (-40°F) |
| RFX 1 5/8"-50 GHF RF2X 1 5/8"-50 GHF | Grey, halogen free fire retardant thermoplastic | yes | yes | yes | no | -5°C (-4°F) |
| RFX 1 5/8"-50 BHF RF2X 1 5/8"-50 BHF | Black, halogen free fire retardant thermoplastic | yes | yes | yes | yes | -5°C (-4°F) |

| ELECTRICAL CHARACTERISTICS at +20°C (+68°F) | | |
|---|-----------|------------------|
| Characteristic impedance | 50 ± 2 Ω | |
| 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 (measured acc. to IEC 61196-4 free space method) | | |
|---|--------------|------------------|
| RFX 1 5/8"-50 | | |
| at 75 MHz | 0.7 dB/100 m | (0.21 dB/100 ft) |
| at 150 MHz | 0.9 dB/100 m | (0.27 dB/100 ft) |
| at 450 MHz | 1.7 dB/100 m | (0.52 dB/100 ft) |
| at 900 MHz | 2.7 dB/100 m | (0.82 dB/100 ft) |
| at 1.8 GHz | 4.6 dB/100 m | (1.40 dB/100 ft) |
| at 2.1 GHz | 5.2 dB/100 m | (1.58 dB/100 ft) |
| at 2.4 GHz | 6.2 dB/100 m | (1.89 dB/100 ft) |

| COUPLING LOSS (measured acc. to IEC 61196-4 free space method) | | | |
|---|-----------|-----------|--|
| RFX 1 5/8"-50 | 50% value | 95% value | |
| at 75 MHz | 53 dB | 60 dB | |
| at 150 MHz | 63 dB | 69 dB | |
| at 450 MHz | 68 dB | 73 dB | |
| at 900 MHz | 68 dB | 73 dB | |
| at 1.8 GHz | 69 dB | 75 dB | |
| at 2.1 GHz | 67 dB | 72 dB | |
| at 2.4 GHz | 68 dB | 74 dB | |

| RF2X 1 5/8"-50 | | |
|-----------------------|--------------|------------------|
| at 75 MHz | 0.7 dB/100 m | (0.21 dB/100 ft) |
| at 150 MHz | 1.0 dB/100 m | (0.30 dB/100 ft) |
| at 450 MHz | 1.9 dB/100 m | (0.58 dB/100 ft) |
| at 900 MHz | 3.0 dB/100 m | (0.91 dB/100 ft) |
| at 1.8 GHz | 5.5 dB/100 m | (1.68 dB/100 ft) |
| at 2.1 GHz | 6.4 dB/100 m | (1.95 dB/100 ft) |
| at 2.4 GHz | 7.5 dB/100 m | (2.29 dB/100 ft) |

| RF2X 1 5/8"-50 | | | |
|-----------------------|-----------|-------|--|
| 50% value | 95% value | | |
| at 75 MHz | 50 dB | 56 dB | |
| at 150 MHz | 58 dB | 63 dB | |
| at 450 MHz | 63 dB | 67 dB | |
| at 900 MHz | 64 dB | 72 dB | |
| at 1.8 GHz | 66 dB | 73 dB | |
| at 2.1 GHz | 65 dB | 72 dB | |
| at 2.4 GHz | 66 dB | 74 dB | |

| STANDARD DRUM | | | | | | | |
|---------------|------|-----------------|-----------------|-----------------|---------------------|--------------|------------------------|
| Cable type | Drum | Standard length | Outer diam. (D) | Outer width (W) | Drum weight (empty) | Total weight | Drum freight volume |
| | | m (ft) | cm (in) | cm (in) | kg (lb) | kg (lb) | m ³ (cu.ft) |
| RFX 1 5/8" | P20G | 400 (1312) | 204 (80) | 74 (29) | 157 (346) | 654 (1443) | 3.08 (108.77) |

| CODES FOR NKC CONNECTORS | |
|--------------------------|------------|
| Connector type | Code |
| 7-16 male | NKC1158100 |
| 7-16 female | NKC1158200 |
| 7-16 Bulkhead female | NKC1158290 |
| N male | NKC1158300 |
| N female | NKC1158400 |