

RFX 1/2" COAXIAL ANTENNA
NK CODES
RFX 1/2"-50
RFX 1/2"-50 BHF
RFX 1/2"-50 MBHF
NKRFX01200
NKRFX01202
NKRFX01207
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 single side 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		

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	2.28 Ω/km	(0.69 Ω/1000 ft)

ATTENUATION AND COUPLING LOSS ACC. TO IEC 61196-4

Frequency MHz	Attenuation dB/100m (dB/100ft) ± 5%	Coupling loss 50%, dB ± 10 dB	Coupling loss 95%, dB ± 10 dB	Coupling loss * 50%, dB ± 10 dB	Coupling loss * 95%, dB ± 10 dB
75	2.0 (0.61)	61	67	-	-
150	2.8 (0.85)	67	73	54	58
450	5.0 (1.52)	75	81	56	61
900	7.3 (2.23)	76	82	60	66
1800	10.8 (3.29)	77	84	68	74
2200	12.1 (3.69)	78	86	67	71
2400	12.6 (3.84)	78	87	69	74
2600	13.4 (4.08)	78	86	69	74

*Attenuation and coupling loss values are typical and measured acc. to IEC 61196-4 free space method.
* Coupling loss values are real measurement results from simulated sub-way tunnel.*

MECHANICAL CHARACTERISTICS

Weight (polyethylene jacket)	0.22 kg/m	(0.15 lb/ft)
Weight (BHF fire retardant jacket)	0.25 kg/m	(0.17 lb/ft)
Maximum pulling force	1550 N	(348 lb)
Minimum single bending radius	120 mm	(4.7 in)
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 60332-1 IEC 60332-3-24 fire retardant	UV retardancy	Min. installation temperature
RFX 1/2"-50	Black, halogen free polyethylene	yes	no	no	yes	-40°C (-40°F)
RFX 1/2"-50 BHF	Black, halogen free fire retardant thermoplastic	yes	yes	yes	yes	-20°C (-4°F)
RFX 1/2"-50 MBHF	Black, halogen free fire retardant thermoplastic with mica tape fire barrier	yes	yes	yes	yes	-20°C (-4°F)

RF2X 1/2" COAXIAL ANTENNA
NK CODES
RF2X 1/2"-50
RF2X 1/2"-50 BHF
RF2X 1/2"-50 MBHF
NKRF2X01200
NKRF2X01202
NKRF2X01207
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 double side 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		

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	2.28 Ω/km	(0.69 Ω/1000 ft)

ATTENUATION AND COUPLING LOSS ACC. TO IEC 61196-4

Frequency MHz	Attenuation dB/100m (dB/100ft) ± 5%	Coupling loss 50%, dB ± 10 dB	Coupling loss 95%, dB ± 10 dB	Coupling loss * 50%, dB ± 10 dB	Coupling loss * 95%, dB ± 10 dB
75	2.2 (0.67)	56	63	-	-
150	3.1 (0.95)	62	67	45	52
450	5.7 (1.74)	68	73	49	55
900	8.4 (2.56)	70	77	52	58
1800	12.7 (3.87)	73	81	61	67
2200	14.3 (4.36)	73	80	62	67
2400	15.1 (4.60)	73	80	63	69
2600	15.8 (4.82)	74	80	63	68

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MECHANICAL CHARACTERISTICS

Weight (polyethylene jacket)	0.22 kg/m	(0.15 lb/ft)
Weight (GHF/BHF fire retardant jacket)	0.25 kg/m	(0.17 lb/ft)
Maximum pulling force	1550 N	(348 lb)
Minimum single bending radius	120 mm	(4.7 in)
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 60332-1 IEC 60332-3-24 fire retardant	UV retardancy	Min. installation temperature
RF2X 1/2"-50	Black, halogen free polyethylene	yes	no	no	yes	-40°C (-40°F)
RF2X 1/2"-50 BHF	Black, halogen free fire retardant thermoplastic	yes	yes	yes	yes	-20°C (-4°F)
RF2X 1/2"-50 MBHF	Black, halogen free fire retardant thermoplastic with mica tape fire barrier	yes	yes	yes	yes	-20°C (-4°F)