

**RFX 7/8"-50 COAXIAL ANTENNA**
**NK CODES**
**RFX 7/8"-50  
RFX 7/8"-50 BHF  
RFX 7/8"-50 MBHF**
**NKRFX07800  
NKRF07802  
NKRF07807**
**CONSTRUCTION**


Inner conductor	Copper tube	Ø 9.4 mm	(0.37 in)
Dielectric	Cellular polyethylene	Ø 22.5 mm	(0.89 in)
Outer conductor	Corrugated single side slotted copper tube	Ø 25.4 mm	(1.00 in)
Jacket	See Jacketing Options table below	Ø 28.0 mm	(1.10 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	0.90	
Capacitance	73 pF/m	(22.3 pF/ft)
Maximum frequency	5100 MHz	
DC-resistance		
- Inner conductor	1.28 Ω/km	(0.39 Ω/1000 ft)
- Outer conductor	1.19 Ω/km	(0.36 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	1,2 (0.37)	52	60	-	-
150	1,6 (0.49)	62	67	51	55
450	2,9 (0.88)	64	70	50	55
900	4,4 (1.34)	69	74	60	66
1800	6,8 (2.07)	71	76	59	64
2200	7,7 (2.35)	71	76	62	67
2400	8,2 (2.50)	75	79	67	72
2600	8,6 (2.62)	73	79	65	70

*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)	0.45 kg/m	(0.30 lb/ft)
Weight (GHF/BHF fire retardant jacket)	0.53 kg/m	(0.35 lb/ft)
Maximum pulling force	2400 N	(539 lb)
Minimum single bending radius	240 mm	(9.4 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 60332-3-24 fire retardant	UV retardancy	Min. installation temperature
RFX 7/8"-50	Black, halogen free polyethylene	yes	no	no	yes	-40°C (-40°F)
RFX 7/8"-50 BHF	Black, halogen free fire retardant thermoplastic	yes	yes	yes	yes	-20°C (-4°F)
RFX 7/8"-50 MBHF	Black, halogen free fire retardant thermoplastic with mica tape fire barrier	yes	yes	yes	yes	-20°C (-4°F)

**RF2X 7/8"-50 COAXIAL ANTENNA**
**NK CODES**
**RF2X 7/8"-50**  
**RF2X 7/8"-50 BHF**  
**RF2X 7/8"-50 MBHF**
**NKRF2X07800**  
**NKRF2X07802**  
**NKRF2X07807**
**CONSTRUCTION**


Inner conductor	Copper tube	Ø 9.4 mm	(0.37 in)
Dielectric	Cellular polyethylene	Ø 22.5 mm	(0.89 in)
Outer conductor	Corrugated double side slotted copper tube	Ø 25.4 mm	(1.00 in)
Jacket	See Jacketing Options table below	Ø 28.0 mm	(1.10 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	0.90	
Capacitance	73.0 pF/m	(22.3 pF/ft)
Maximum frequency	5100 MHz	
DC-resistance		
- Inner conductor	1.28 Ω/km	(0.39 Ω/1000 ft)
- Outer conductor	1.19 Ω/km	(0.36 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	1.1 (0.34)	47	53	-	-
150	1.7 (0.52)	55	60	47	52
450	3.1 (0.95)	61	68	50	54
900	4.6 (1.40)	64	71	47	52
1800	7.2 (2.20)	63	69	52	57
2200	8.2 (2.50)	66	72	58	63
2400	8.7 (2.65)	66	74	61	66
2600	9.2 (2.80)	72	78	63	69

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**MECHANICAL CHARACTERISTICS**

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RF2X 7/8"-50 BHF	Black, halogen free fire retardant thermoplastic	yes	yes	yes	yes	-20°C (-4°F)
RF2X 7/8"-50 MBHF	Black, halogen free fire retardant thermoplastic with mica tape fire barrier	yes	yes	yes	yes	-20°C (-4°F)