

COAXIAL ANTENNA

TYPE:

RFX 7/8"-50
RFX 7/8"-50 GHF
RFX 7/8"-50 BHF

NK CODE:

NKRFX07800
NKRFX07801
NKRFX07802

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 single side slotted copper tube	Ø 25.2 mm	(0.99 in)
Jacket	See Jacketing Options table below	Ø 27.8 mm	(1.09 in)
Marking	NK Cables, 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		1.11 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)			
at 75 MHz	1.3 dB/100m	(0.40 dB/100ft)	
at 150 "	1.7 "	(0.52 "	
at 450 "	2.9 "	(0.88 "	
at 900 "	4.2 "	(1.28 "	
at 1.8 GHz	6.2 "	(1.89 "	
at 2.2 "	7.0 "	(2.13 "	
at 2.4 "	7.5 "	(2.29 "	
Coupling loss (measured acc. to IEC 61196-4 free space method)			
	<u>50% value</u>	<u>95% value</u>	
at 75 MHz	62 dB	67 dB	
at 150 "	69 "	75 "	
at 450 "	70 "	74 "	
at 900 "	71 "	77 "	
at 1.8 GHz	76 "	83 "	
at 2.2 "	75 "	82 "	
at 2.4 "	79 "	85 "	

MECHANICAL CHARACTERISTICS

Weight	0.49 kg/m	(0.33 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)

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	Black, halogen free polyethylene	yes	no	no	yes	-40°C (-40°F)
RFX 7/8"-50 GHF	Grey, halogen free fire retardant thermoplastic	yes	yes	yes	no	-20°C (-4°F)
RFX 7/8"-50 BHF	Black, halogen free fire retardant thermoplastic	yes	yes	yes	yes	-20°C (-4°F)