

COAXIAL ANTENNA
TYPE:
NK CODE:
RFX 1/2"-50
RFX 1/2"-50 GHF
RFX 1/2"-50 BHF
NKRFX01200
NKRFX01201
NKRFX01202
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	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		0.88	
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)			
at 75 MHz	2.1 dB/100m		(0.64 dB/100ft)
at 150 "	3.1 "		(0.95 "
at 450 "	5.4 "		(1.65 "
at 900 "	7.9 "		(2.41 "
at 1.8 GHz	11.7 "		(3.57 "
at 2.2 "	13.1 "		(4.00 "
at 2.4 "	14.2 "		(4.34 "
Coupling loss (measured acc. to IEC 61196-4 free space method)			
	<u>50% value</u>	<u>95% value</u>	
at 75 MHz	62 dB	69 dB	
at 150 "	69 "	75 "	
at 450 "	73 "	79 "	
at 900 "	73 "	80 "	
at 1.8 GHz	77 "	84 "	
at 2.2 "	79 "	86 "	
at 2.4 "	83 "	90 "	

MECHANICAL CHARACTERISTICS

Weight	0.23 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)

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	Black, halogen free polyethylene	yes	no	no	yes	-40°C (-40°F)
RFX 1/2"-50 GHF	Grey, halogen free fire retardant thermoplastic	yes	yes	yes	no	-20°C (-4°F)
RFX 1/2"-50 BHF	Black, halogen free fire retardant thermoplastic	yes	yes	yes	yes	-20°C (-4°F)