

COAXIAL ANTENNA
TYPE:

 RF2X 1 1/4"-50
 RF2X 1 1/4"-50 BHF
 RF2X 1 1/4"-50 MBHF

NK CODE:

 NKRF2X11400
 NKRF2X11402
 NKRF2X11407

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 double side 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		

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 (typical, measured acc. to IEC 61196-4 free space method)		
at 75 MHz	1.0 dB/100m	(0.30 dB/100ft)
at 150 "	1.4 "	(0.43 "
at 450 "	2.5 "	(0.76 "
at 900 "	4.1 "	(1.25 "
at 1.8 GHz	7.9 "	(2.41 "
at 2.1 "	9.1 "	(2.77 "
at 2.4 "	11.2 "	(3.41 "

Coupling loss (typical, measured acc. to IEC 61196-4 free space method)		
	<u>50% value</u>	<u>95% value</u>
at 75 MHz	47 dB	53 dB
at 150 "	54 "	60 "
at 450 "	64 "	71 "
at 900 "	64 "	71 "
at 1.8 GHz	64 "	70 "
at 2.1 "	65 "	71 "
at 2.4 "	64 "	71 "

MECHANICAL CHARACTERISTICS

Weight (polyethylene jacket)	0.85 kg/m	(0.57 lb/ft)
Weight (GHF/BHF fire retardant jacket)	0.95 kg/m	(0.64 lb/ft)
Maximum pulling force	6050 N	(1340 lb)
Minimum single bending radius	350 mm	(14 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
RF2X 1 1/4"-50	Black, halogen free polyethylene	yes	no	no	yes	-40°C (-40°F)
RF2X 1 1/4"-50 BHF	Black, halogen free fire retardant thermoplastic	yes	no	yes	yes	-5°C (+23°F)
RF2X 1 1/4"-50 MBHF	Black, halogen free fire retardant thermoplastic with mica tape fire barrier	yes	yes	yes	yes	-5°C (+23°F)