

**COAXIAL ANTENNA**
**TYPE:**
**RF2X 7/8"-50**  
**RF2X 7/8"-50 BHF**  
**RF2X 7/8"-50 MBHF**
**NK code:**
**NKRF2X07800**  
**NKRF2X07802**  
**NKRF2X07807**
**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 double 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	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	1.11 Ω/km	(0.34 Ω/1000 ft)
- Outer conductor	1.11 Ω/km	(0.34 Ω/1000 ft)

Attenuation (typical, measured acc. to IEC 61196-4 free space method)		
at 75 MHz	1.4 dB/100m	(0.43 dB/100ft)
at 150 "	1.8 "	(0.55 "
at 450 "	3.5 "	(1.07 "
at 900 "	5.4 "	(1.65 "
at 1.8 GHz	8.8 "	(2.68 "
at 2.1 "	10.0 "	(3.05 "
at 2.4 "	11.3 "	(3.44 "

Coupling loss (typical, measured acc. to IEC 61196-4 free space method)		
	<u>50% value</u>	<u>95% value</u>
at 75 MHz	49 dB	55 dB
at 150 "	57 "	62 "
at 450 "	62 "	69 "
at 900 "	64 "	71 "
at 1.8 GHz	65 "	71 "
at 2.1 "	67 "	74 "
at 2.4 "	68 "	77 "

**MECHANICAL CHARACTERISTICS**

Weight (polyethylene jacket)	0.46 kg/m	(0.31lb/ft)
Weight (GHF/BHF fire retardant jacket)	0.53 kg/m	(0.35lb/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 60332-3-24 fire retardant	UV retardancy	Min. installation temperature
RF2X 7/8"-50	Black, halogen free polyethylene	yes	no	no	yes	-40°C (-40°F)
RF2X 7/8"-50 BHF	Black, halogen free fire retardant thermoplastic	yes	no	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)