

**COAXIAL ANTENNA**

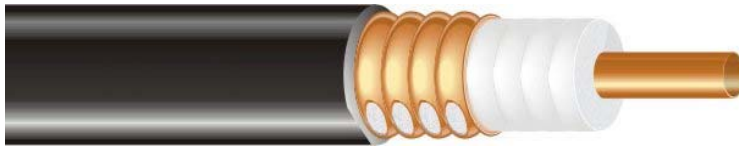
**TYPE:**

**NK CODE:**

**RFX 7/8"-50**  
**RFX 7/8"-50 BHF**  
**RFX 7/8"-50 MBHF**

**NKRFX07800**  
**NKRFX07802**  
**NKRFX07807**

**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	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	1.11 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	1.2 dB/100m	(0.37 dB/100ft)
at 150 "	1.6 "	(0.49 " )
at 450 "	3.0 "	(0.91 " )
at 900 "	4.5 "	(1.37 " )
at 1.8 GHz	6.9 "	(2.10 " )
at 2.1 "	7.9 "	(2.41 " )
at 2.4 "	8.6 "	(2.62 " )

Coupling loss (typical, measured acc. to IEC 61196-4 free space method)		
	<u>50% value</u>	<u>95% value</u>
at 75 MHz	51 dB	61 dB
at 150 "	63 "	69 "
at 450 "	69 "	73 "
at 900 "	70 "	78 "
at 1.8 GHz	72 "	77 "
at 2.1 "	71 "	76 "
at 2.4 "	77 "	84 "

**MECHANICAL CHARACTERISTICS**

Weight (polyethylene jacket)	0.46 kg/m	(0.31 lb/ft)
Weight (GHF/BHF fire retardant jacket)	0.53 kg/m	(0.35 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 60332-3-24 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	no	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)