

29.2.2008

**COAXIAL ANTENNA** 

TYPE:

RF2X 1 5/8"-50 RF2X 1 5/8"-50 BHF RF2X 1 5/8"-50 MBHF NK CODE: NKRF2X15800 NKRF2X15802 NKRF2X15807

#### CONSTRUCTION



batch number and meter mark

Inner conductor	Corrugated copper tube	Ø 17.6 mm	(0.69 in)
Dielectric	Cellular polyethylene	Ø 42.0 mm	(1.65 in)
Outer conductor	Corrugated double side slotted copper tube	Ø 46.3 mm	(1.82 in)
Jacket	See Jacketing Options table below	Ø 50.0 mm	(1.97 in)
Marking	Draka cable type manufacture week year		. ,

# ELECTRICAL CHARACTERISTICS at +20°C (+68°F)

 $50 \pm 2 \Omega$ Characteristic impedance Typical return loss (VSWR) on effective frequency range 18 dB (1.29)Velocity factor 0.89 74 pF/m Capacitance (22.6 pF/ft) Maximum frequency 2800 MHz DC-resistance 1.16 Ω/km  $(0.35 \Omega/1000 \text{ ft})$ - Inner conductor

- Outer conductor  $0.43~\Omega/km$ (0.13 Ω/1000 ft)

Attenuation (typical, measured acc. to IEC 61196-4 free space method)

at 75 MHz	0.7 dB/100m	(0.21 dB/100ft)
at 150 "	1.0 "	(0.30 ")
at 450 "	1.9 "	(0.58 ")
at 900 "	3.0 "	(0.91 " )
at 1.8 GHz	5.5 "	(1.68 " )
at 2.1 "	6.4 "	(1.95 " )
at 2.4 "	7.5 "	(2.29 " )

# Coupling loss (typical, measured acc. to IEC 61196-4 free space method)

	<u>50% value</u>	95% value		
at 75 MHz	50 dB	56 dB		
at 150 "	58 "	63 "		
at 450 "	63 "	67 "		
at 900 "	64 "	72 "		
at 1.8 GHz	66 "	73 "		
at 2.1 "	65 "	72 "		
at 2.4 "	66 "	74 "		

## **MECHANICAL CHARACTERISTICS**

Weight (polyethylene jacket) Weight (GHF/BHF fire retardant jacket) (0.75 lb/ft) 1.12 kg/m 1.28 kg/m (0.86 lb/ft) Maximum pulling force 3750 Ň (826 lb) Minimum single bending radius 400 mm (15.7 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 60332-3-24 fire retardant	UV retardancy	Min. installation temperature
RF2X 1 5/8"-50	Black, halogen free polyethylene	yes	no	no	yes	-40°C (-40°F)
RF2X 1 5/8"-50 BHF	Black, halogen free fire retardant thermoplastic	yes	no	yes	yes	-5°C (+23°F)
RF2X 1 5/8"-50 MBHF	Black, halogen free fire retardant thermoplastic with mica tape fire barrier	yes	yes	yes	yes	-5°C (+23°F)