



TECHNICAL DATA SHEET

50 ohm Connectors for Radiating Cables

Kabelwerk | **EUPEN** AG

Rev.: 02/2011-12-01

cable

**NEW
DESIGN**

Connector for LSC/RMC 114 (1" 1/4) radiating cables

FEATURES

- Low reflection coefficient (up to 3.0 GHz)
- High contact force through inner contacts made in a high-strength copper alloy
- Monoblock mounting
- Silver plated
- Watertight (IP67/IP68)
- Corrosion resistant
- Quick trimming tool for cable preparation
- O-ring sealing



NF50R114MPA



716FR114MPA

The connectors are designed according the standard interfaces as N or DIN 7/16. Contact components are silver plated to minimize insertion loss; mechanical parts are nickel plated for heavy-duty handling and best corrosion resistance. Watertightness is achieved using silicone o-rings to resist in the toughest environmental conditions. Special trimming tools are recommended.

SPECIFICATIONS

Connector type	N-male	N-female	7-16 male	7-16 female
Electrical specifications				
• Nominal impedance [Ω]			50	
• Reflection coefficient @ 3 GHz [dB]			≥ 35	
• Insulation resistance [$G\Omega$]	≥ 5			≥ 10
• Test voltage (at sea level) [KV rms, 50Hz]	2.5			4
• Working voltage (at sea level) [KV rms,50Hz]	1.0			2.7
• Screening effectiveness up to 1 GHz [dB]			> 128	
• Contact resistance (outer contact) [$m\Omega$]			≤ 1.0	
• Contact resistance (inner contact) [$m\Omega$]			≤ 1.0	
Mechanical specifications				
• Torque of coupling mechanism [Nm]	8			30
• Tensile strength of coupling mechanism [N]	400			700
• Cable retention [N]			> 1000	
• Mechanical endurance (Nr of couplings)			≥ 500	
• Outer diameter [mm]			51.5	
• Length [mm]	85	79	73	74
• Weight [g]	520	510	485	520
Environmental specifications				
• Temperature range	-40 °C to +85 °C (-40 °F to +185 °F)			
• Degree of protection	IP67/IP68 (mated connectors)			
Materials				
• Externals parts	Passivated silver plated or electroless nickel plated brass			
• Outer contact	Passivated silver plated brass			
• Inner contact	Passivated silver plated high-strength copper alloy			
• Dielectric	TPX			
• O-rings	High quality silicone & Nitrile			
Cable dimensions [mm]				
• Inner conductor inner diameter	11.8 to 12.2			
• Jacket outer diameter	37.1 to 38.9			
Order codes				
• O-ring connector type	NM50R114MPA	NF50R114MPA	716MR114MPA	716FR114MPA
• Special trimming tool	SPTC50R114E			