



TECHNICAL DATA SHEET

50 ohm Connectors for Radiating Cables

Kabelwerk | **EUPEN** AG

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cable

**NEW
DESIGN**

Connector for LSC/RMC 158 (1" 5/8) 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**



NF50R158MPA



716FR158MPA

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 Ω]			≤ 1.0	
• Contact resistance (inner contact) [m Ω]			≤ 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]			63	
• Length [mm]	93	88	83	83
• Weight [g]	722	710	730	725
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	14.3 to 14.7			
• Jacket outer diameter	47.0 to 49.0			
Order codes				
• O-ring connector type	NM50R158MPA	NF50R158MPA	716MR158MPA	716FR158MPA
• Special trimming tool	SPTC50R158E			