



TECHNICAL DATA SHEET

50 ohm Connectors for Radiating Cables

Kabelwerk **EUPEN** AG

Rev.: 07/2023-10-12

cable

Connectors for LSC/RMC 7/8" radiating cables

FEATURES

- High contact force and inner contacts made in a high-strength copper alloy
- Silver or Trimetal Plated
- Watertight (IP67/IP68)
- Corrosion resistant
- Quick trimming tool
- Installation "fit on and tighten it"
- New 4.3-10 interface available



43FR78A



NM50R78A



43FR78L



NF50R78L

The connectors are designed according to the standard interfaces as 4.3-10, N or DIN 7-16. Contact components are silver or trimetal plated to minimize insertion loss and passive intermodulation products. The special quick trimming tool makes installation very easy and cost effective in time.

SPECIFICATIONS

Connector type	N-male	N-female	7-16 female	4.3-10 female
Electrical specifications				
• Nominal impedance [Ω]		50		
• Reflection coefficient @ 3 GHz [dB]		≥ 35		
• Insulation resistance [$G\Omega$]	≥ 5		≥ 10	≥ 5
• Test voltage (at sea level) [kV rms, 50Hz]	2.5		4	2.5
• Working voltage (at sea level) [kV rms, 50Hz]	1		2.7	1.0
• Contact resistance (outer contact) [m Ω]		≤ 2		≤ 1.0
• Contact resistance (inner contact) [m Ω]		≤ 2		≤ 1.0
• PIM ratio (2 x 20 W carrier) [dBc]	-			≤ -155
Mechanical specifications				
• Torque of coupling mechanism [Nm]	3 to 5		30	5 to 8
• Tensile strength of coupling mechanism [N]	400		1000	500
• Cable retention [N]	> 500		> 1000	> 1000
• Mechanical endurance (Nr of couplings)		≥ 500		
Environmental specifications				
• Temperature range		-40 °C to +85 °C (-40 °F to +185 °F)		
• Degree of protection		IP67/IP68 (mated connectors) ⁽¹⁾		
Materials				
• Externals parts	Passivated silver plated or trimetal or nickel plated brass			
• Outer contact	Passivated silver or trimetal plated brass			
• Inner contact	Passivated silver plated high-strength copper alloy and brass			
• Dielectric	PTFE and (or) TPX			
• Gaskets	High quality silicone & nitrile			
Tool codes				
• 7/8"	SPTC50R78			
Connectors codes				
• 7/8" with O.D. 27 mm ⁽²⁾	NM50R78A	NF50R78A	716FR78A	43FR78A
• 7/8" with O.D. 28 mm ⁽³⁾		NF50R78L	716FR78L	43FR78L

⁽¹⁾ For installations in harsh environments, the use of an optional Heat-Shrink is recommended.

⁽²⁾ RMC 78 and LSC 78 cables with HLFR suffix or without suffix (PE version).

⁽³⁾ RMC 78 cables with HLFBR/D, HLFRR, HLFRC, HLFR-C_{ca} and HLFR-B2_{ca} suffix.