



TECHNICAL DATA SHEET

50 ohm Connectors for RF Cables

Kabelwerk **EUPEN** AG

Rev.: 01/2007-02-22

cable

Connector 1-1/4" for EC6-50-A and EC6-50-HF (5328A and 5328X)

FEATURES

- Low reflection coefficient (up to 2.5 GHz)
- Low PIM level
- High contact force through Cu-Be inner contacts
- Silver plated
- Watertight (IP67/IP68)
- Corrosion resistant
- Quick trimming tool for cable preparation
- One piece "fit on and tighten it"
- Sealant injection or o-ring sealing



NF50V114M



716MA114M

The connectors are designed according the standard interfaces as N or DIN 7/16. Contact components are silver plated to minimize insertion loss and passive intermodulation products; mechanical parts are nickel plated for heavy-duty handling and best corrosion resistance. The watertightness is made using silicone o-rings or silicone sealant injection, filling up all interstices to resist in the toughest environmental conditions. In addition of this proved quality the 1-1/4" connectors are compatible with standard and hiflex 1-1/4" Eupen cables offering excellent electrical specifications. For a cost effective, easy and reliable installation, 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 @ 2.5 GHz			≤ 0.02	
• 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			2.7
• Screening effectiveness up to 1 GHz [dB]			> 128	
• Contact resistance (outer contact) [$m\Omega$]			≤ 0.5	
• Contact resistance (inner contact) [$m\Omega$]			≤ 1	
• PIM ratio (2x25 W carrier) [dBc]			≤ -155 (Typical -163)	
Mechanical specifications				
• Torque of coupling mechanism [Nm]	8			30
• Tensile strength of coupling mechanism [N]	400			1000
• Cable retention [N]	> 400			> 1000
• Mechanical endurance (Nr of couplings)			≥ 500	
• Outer diameter [mm]			48	
• Length [mm]	89	83	82	81
• Weight [g]	368	366	386	378
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 Cu-Be and brass			
• Dielectric	TPX			
• O-rings	High quality silicone			
Cable dimensions [mm]				
• Inner conductor (helicoids) inner diameter	11.6 (10.2) to 12.0			
• Outer conductor outer diameter	35.3 to 36.6			
• Jacket outer diameter	38.5 to 39.5			
Order codes				
• Sealant injection connector type	NM50A114M	NF50A114M	716MA114M	716FA114M
• O-ring connector type	NM50V114M	NF50V114M	716MV114M	716FV114M
• Special trimming tool for standard cable	SPTC50AV114M – Blue color			
• Special trimming tool for hiflex cable	SPTC50AV114X – Green color			
• Special silicone sealant kit	SIL 744			

