



# TECHNICAL DATA SHEET

## 50 ohm Connectors for RF Cables

Kabelwerk | **EUPEN** AG

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**cable**

### Connector 5/8" for EC4.5-50 (5168)

#### FEATURES

- **Wide frequency range (up to 6.0 GHz)**
- **For WLAN at the 5 GHz-Band (UNII / ISM: 5.150 - 5.825 GHz)**
- **Easy (manual) installation**
- **Silver plated**
- **Watertight (IP67/IP68)**
- **Corrosion resistant**
- **O-ring sealing**



NM50V58



NF50V58

The connector was specially designed for the use at the US unlicensed WLAN 5 GHz Band (UNII / ISM: 5.150 to 5.825 GHz). The two-part connector is easy to install. No special tool is needed. The watertightness is made using a silicone o-ring.

#### SPECIFICATIONS

Connector type	N-male	N-female
<b>Electrical specifications</b>		
• Nominal impedance [ $\Omega$ ]		50
• Frequency range		DC to 6 GHz
• Return Loss, 1 m Jumper, 5.15 - 5.825 GHz [dB]		> 25
• Reflection coefficient @ 6 GHz [dB]		$\leq 0.02$ ( $\geq 35$ )
• Insulation resistance [ $G\Omega$ ]		$\geq 5$
• Test voltage (at sea level) [kV rms, 50Hz]		2.5
• Working voltage (at sea level) max. [kV rms, 50Hz]		1
• Max. peak power [kW]		10
• Screening effectiveness @ 1 GHz [dB]		> 128
• Contact resistance (outer contact) [ $m\Omega$ ]		$\leq 1$
• Contact resistance (inner contact) [ $m\Omega$ ]		$\leq 1$
<b>Mechanical specifications</b>		
• Coupling torque [Nm]		8
• Cable retention [N]		> 400
• Outer diameter [mm]		29
• Length [mm]	78,5	78
• Weight [g]	176	174
<b>Environmental specifications</b>		
• Temperature range	-40 °C to +70 °C (-40 °F to +158 °F)	
• Degree of protection (mated connectors)	IP67/IP68	
<b>Materials</b>		
• Center conductor	Brass (gold-plated)	bronze (gold-plated)
• Connector body	silver / nickel plated brass	
• Insulator	PTFE	
• Gaskets	Silicone rubber	
<b>Cable dimensions</b>		
• Inner conductor [mm]	7.04 $\pm$ 0.05	
• Outer conductor outer diameter [mm]	19.7 $\pm$ 0.3	
• Jacket [mm]	21.9 $\pm$ 0.4	

#### PRODUCT OVERVIEW

Product reference	Type	Sealing	Part#
• NM50V58	N-Male	O-ring	A153996
• NF50V58	N-Female	O-ring	A154996