



TECHNICAL DATA SHEET

50 ohm Connectors for RF Cables

Kabelwerk **EUPEN** AG

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cable

Connector 1/2" Hiflex for EC4-50-HF (5092)

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**
- **On piece "screw on and tighten it"**



716MBL12X



NF50B12X



716MB12X

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 simultaneously on the outer conductor and on the jacket using a special silicone gasket. This watertightness solution allows the use of ours connectors in the toughest environmental conditions. 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	N-male right angle	7-16 male right angle
Electrical specifications						
• Nominal impedance [Ω]	50					
• Reflection coefficient @ 2.5 GHz	≤ 0.02					
• Insulation resistance [$G\Omega$]	≥ 5		≥ 10		≥ 5	≥ 10
• Test voltage (at sea level) [KV rms, 50Hz]	2.5		4		2.5	4
• Working voltage (at sea level) [KV rms, 50Hz]	1		2.7		1	2.7
• Screening effectiveness up to 1 GHz [dB]	> 128					
• Contact resistance (outer contact) [$m\Omega$]	≤ 1					
• 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		8	30
• Tensile strength of coupling mechanism [N]	400		1000		400	1000
• Cable retention [N]	> 400		> 700		> 400	> 700
• Mechanical endurance (Nr of couplings)	≥ 500					
• Outer diameter [mm]	22	22	35	29	23	23
• Length [mm]	61	59	50	51	51 x 41	55 x 39.5
• Weight [g]	100	100	120	115	138	160
Environmental specifications						
• Temperature range	$-40\text{ }^{\circ}\text{C}$ to $+85\text{ }^{\circ}\text{C}$ ($-40\text{ }^{\circ}\text{F}$ to $+185\text{ }^{\circ}\text{F}$)					
• 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	PTFE		TPX		TPX / PTFE	
• Gaskets	High quality silicone					
Cable dimensions [mm]						
• Inner conductor outer diameter	3.5 to 3.6					
• Outer conductor outer diameter	12 to 12.4					
• Jacket outer diameter	13 to 13.8					
Order codes						
• Connector type	NM50B12X	NF50B12X	716MB12X	716FB12X	NM50BL12X	716MBL12X
• Special trimming tool	SPTC50B12X – Silver color SPTC50BL12X-Black color					