

Electrical Characteristics (at 20 °C and 65 % relative humidity)

Impedance	75 Ω
Frequency range	0 up to 6 GHz
Return loss - plug	≥ 32 dB up to 3 GHz
.....	≥ 28 dB up to 6 GHz
VSWR - plug	≤ 1.05 up to 3 GHz
.....	≤ 1.08 up to 6 GHz
Reflection factor - plug.....	≤ 2.5 % up to 3 GHz
.....	≤ 4 % up to 6 GHz
Return loss - socket.....	≥ 31 dB up to 3 GHz
.....	≥ 27 dB up to 6 GHz
VSWR socket	≤ 1.06 up to 3 GHz
.....	≤ 1.09 up to 6 GHz
Reflection factor - socket	≤ 2.8 % up to 3 GHz
.....	≤ 4.5 % up to 6 GHz

Contact resistance (connector plugged with socket)

Inner conductor	≤ 3 m Ω
Outer conductor.....	≤ 1 m Ω
Insulation resistance	≥ 5 G Ω

Test voltage U_{eff}

Connectors for cable diameter.....	≤ 4 mm 1000 V
Connectors for cable diameter.....	≥ 5 mm 1500 V

Operating voltage U_{eff}

Connectors for cable diameter.....	≤ 4 mm 400V
Connectors for cable diameter.....	≥ 5 mm 500V

Operating Temperature Range..... - 65 °C up to +165 °C**Mechanical Characteristics**

Durability (mating cycles)	≥ 2000
RoHS	compliant

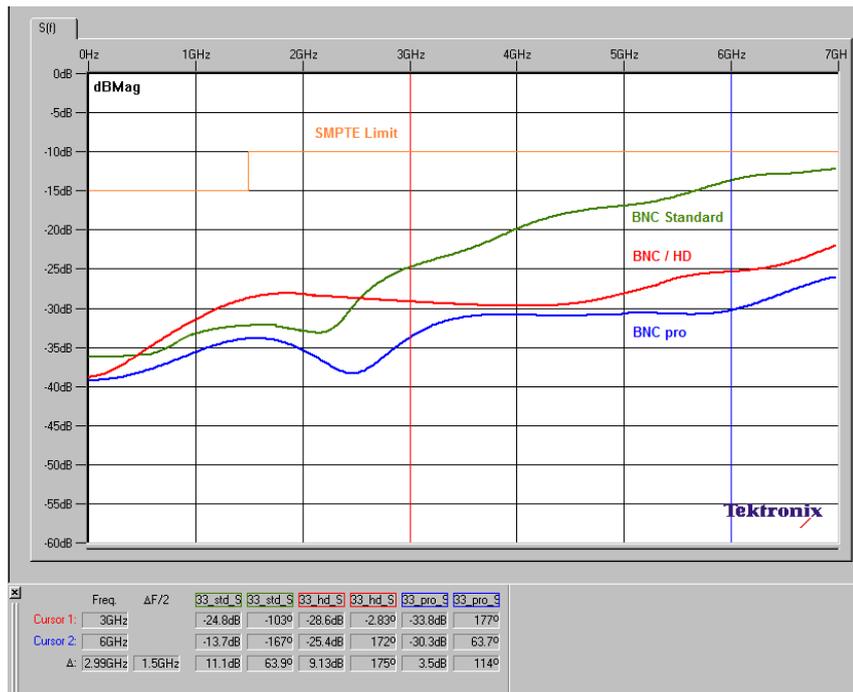
Construction Plug

Inner conductor	Brass, non-magnetic, hard gold-plated
Dielectric	PTFE
Outer conductor.....	Brass, without magnetic, hard gold-plated
Spring elements	Beryllium copper/Stainless steel
Other material parts.....	Brass/Stainless steel
Gasket.....	Silicon
Coupling ring	Brass, nickel-plated
Crimp sleeve	Copper, nickel-plated
Strain Relief Sleeve	Polyurethane (PUR)

Construction Socket

Inner conductor	Beryllium copper, non-magnetic, hard gold-plated
Dielectric	PTFE
Outer conductor.....	Brass, non-magnetic, hard gold-plated
Crimp sleeve	Copper, nickel-plated
Strain Relief Sleeve	Polyurethane (PUR)

Comparative measurement of Cable Plugs



Measured: Patch cable 0.3 m with cable plugs of different BNC-Series
Instrument: Measurement with time domain reflectometer of Tektronix.

Series	Part Number	R _L [dB] (Return loss)		VSWR (Voltage standing wave ratio)		r [%] (Reflecion)	
		3 GHz	6 GHz	3 GHz	6 GHz	3 GHz	6 GHz
BNC Standard	1-5126-2100	-23	-12	1.15	1.67	7	25
BNC HD	1-6051-2100	-27	-23	1.09	1.15	4.5	7
BNC pro	1-8478-13100	-32	-28	1.05	1.08	2.5	4

The specified data serve only to describe the product and should not be considered legally binding, guaranteed properties. Depending on the application, design, type of cable and assembly method the specified values may differ. We reserve the right to make constructional changes, determine delivery and are not responsible for any errors and omissions.